CONSTRUCTION NEWS

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RAILWAYS.

CANADIAN NORTHERN.—This company has taken over the charter of the St. Mary's & Western Ontario Ry., and has secured an entrance into Stratford, Ont.

McMillan Bros., Winnipeg, Man., have commenced construction on their 70-mile contract westward from Edmonton, Alta. Work will be carried on through the winter.

CANADIAN PACIFIC.—The company has applied for charters to build the following branch lines: Lanigan, Sask., to Prince Albert, Sask.; from Wilkie, Sask., northerly and northwesterly to connect with the Lacombe branch; from Outlook, Sask., to the Lacombe branch from Esteven, Sask., to the ward, Sask., and from Teulon, Man., to Marsh Point, Man.

CHESAPEAKE & OHIO RY.—An extension of the Big Sandy branch is under consideration. This will commence near the Buchanan County (Va.) line and run along the Lavisa Fork of the Big Sandy to the properties of the Pocohontas Consolidated Collieries Co., and the Mason Coal & Coke Co., in Buchanan County. The road may also be extended to a point about 19 miles from Richlands. F. I. Cabell, Richmond, Va., is Ch. Engr.

CHICAGO & NORTHWESTERN R. R.—This company is purchasing additional right-of-way with the view to constructing a double track from Elgin to Lake Geneva. E. C. Carter, Chicago, Ill., is Ch. Engr.

GEORGIA.—A charter has been granted to the Carnesville Railway Co. to construct a railroad from Toccoa, Stephons Co., to Carnesville, Franklin Co., by the way of Mize and Red Hill. The contemplated road is approximately 20 miles long. The incorporators are: W. S. Erwin, J. H. Hicks and E. S. Hunnicutt, Clarkesville; G. W. Edwards and W. G Davis, of Toccoa; J. C. Andrews and W. H. Parker, of Mize; W. R. Whiting and W. P. King, of Red Hill; S. P. Oliver, L. F. Lenhardt, J. W. Landrum and J. R. Hall, of Carnesville.

GRAND RIVER, MEEKER & SALT LAKE R. R.—This road has recently been incorporated and it is the intention to run from a point on the Grand River in Garfield County, Colo., through Rio Blanco County, Colo., and Uinta, Wasatch, Summit and Lake Counties in Utah, to the terminus at Salt Lake City. The incorporators are: John T. McClure and William D. Lippitt, St. Louis; A. S. Vanderhoff, New York, N. Y., and Mitchell Dawes, Providence, R. I. The Superintendent of Construction of this road is Geo. R. Simmons, Denver, who was recently associated with the Moffit Road in a similar capacity. The general offices of the company will be located in Ernst & Cramer Bldg., Denver. The contract for building about 300 miles of line was reported to have been let to the MEEKER-RANGELY CONSTRUCTION CO., Railway Exchange Bldg., Denver.

GRAND TRUNK PACIFIC.—The company has decided to build a branch from the main line at Edson, Alta., to the Brazeau coal fields, a distance of approximately 51 miles.

ILLINOIS.—A license to incorporate has been issued to the Alton & Mississippi River Belt Ry. & Transportation Co., with principal offices in Chicago, and with a capital stock nominally $25,000. It is proposed to construct the road from a point in St. Clair County, on the eastern inner harbor line of the Mississippi River, opposite St. Louis, through St. Clair and Madison counties, to Alton. The incorporators and first board of directors are: John W. Bissell, Julius H. Quasser, Henry L. Stern, Herbert J. Friedman and Michael Feinberg, all of Chicago.

KANSAS CITY SOUTHERN R. R.—Press advices are to the effect that this road contemplates the construction of an air line from Leesville to Houston, Texas, about 135 miles. This company has long been seeking an entrance to Houston. The exact location has not been determined, but will extend through the timber section of Texas. H. De W. Smith, Texarkana, Tex., is Asst. Engr.

LEXINGTON & EASTERN RY.—The contracts for the 80-mile extension have been let to the following firms: LANE BROS., Jackson, Ky.; MASON HANGER & CO., Richmond, Ky.; JAMES BROS., Richmond, Va.; W. J. OLIVER, Knoxville, Tenn., and the LUX CONSTRUCTION CO., Springfield, Ohio. The work will cost approximately $35,000 per mile. The proposed route crosses the north fork of the Kentucky River, twelve times, and extends through Breathitt, across Perry and into Letcher Counties at the foot of the Cumberland Mountains. Six tunnels will be built. John Marston, Jr., Lexington, Ky., is Ch. Engr.

MIDLAND VALLEY R. R.—An extension is planned from Glen Pool to Sapulpa, Okla., about 10 miles. It is proposed to later extend the line to Cushing, a distance of 40 miles from Sapulpa. J. H. Harris, Muskogee, Okla., is Gen. Supt.

MISSOURI RIVER & NORTHERN R. R.—This company has recently been incorporated to build a railroad from Chamberlain to Huron, S. Dak., through the counties of Brule, Buffalo, Hand and Beadle. The Missouri Valley Engineering Co. is doing the engineering work.

NUCES RIVER VALLEY R. R.—Contracts will shortly be let for an extension from Beeville to Eagle Pass, Tex. This line, 180 miles, will be through Simmons City, Tilden and Carrizo Springs. The construction will be light, the maximum grades being under 1% and the curvature less than 2°. Only three bridges of any importance will be needed. W. A. Frisby, Beeville, Tex., is Pres., and G. A. Hubb, Const. Engr.

PENNSYLVANIA R. R.—This company has under consideration extensive improvements in the city of Chicago and has already ordered part of the engineering force, which worked on the New York City improvement, to that city to make surveys and plans. It has under consideration the elevation of all tracks from 39th St. to 69th St., in Chicago, as well as building a new station. Plans have also been made for an extension through Englewood connecting the Pittsburg, Cincinnati, Chicago & St. Louis, and the Pittsburg, Ft. Wayne & Chicago Ry.

PENNSYLVANIA R. R.—Newspaper advices are to the effect that the proposed extension of the West Jersey & Sea Shore R. R., from Penn's Grove through Pennville toward Salem, will be built only to Fort Mott.

PITTSBURG & LAKE ERIE R. R.—The company is laying out a new freight yard in New Brighton, Pa., and the contract for the grading work has been let to JOHN B. POTTER, Monaca, Pa. J. A. Atwood, Pittsburg, Pa., is Ch. Engr.

PRAIRIE FARM & SOUTHWESTERN RY. CO.—The proposed steam railroad from Prairie Farm to Emerald will be 22 miles long. Surveys have been completed and practically all of the right-of-way has been obtained. In fact, about 12 miles of grading work has been finished, as a part of the capital for the construction is on hand. G. E. Scott, Prarie Farm, Wis., is Pres., and J. H. Thomas, Emerald, is Ch. Engr. Noted Oct. 13

ST LOUIS & SAN FRANCISCO R R.—In an interview recently published in the "Mexican Herald," it was said that the Frisco system will extend its line down the east coast of Mexico to Tampico and later to Mexico City. This system is part owner of the new bridge over the Rio Grande, connecting Brownsville and Matarmoras. M. C. Byers, St. Louis, Mo., is Ch. Engr.

SUPERIOR & SOUTHEASTERN RY.—A contract has been awarded to BALCH & CO., Rice Lake, Wis., to build a ten-mile extension from Grandview, Wis. S. Jacobson, Grandview, Wis., is Supt.

WEST VIRGINIA.—The Greenbrier, Cheat & Elk River R. R., which was recently incorporated, intends to build from Bemis, W. Va., to Webster Springs, W. Va. Connections will be made with the Chesapeake & Ohio, the Western Haryland and the Baltimore & Ohio. All of the surveys have been made, and part of the right-of-way secured. The distance is 75 miles and the work is very heavy. Part of the grading has been done by company forces. S. E. Slaymaker, 200 Fifth Ave., New York, N. Y., is Pres. Noted Oct. 13.

ELECTRICAL RAILWAYS.

PITTSFIELD, MASS.—The contract has been awarded by the Berkshire Street Ry. Co. to FRED. T. LEY & CO., Springfield, for building its Elm St. extension in Pittsfield.

SPRINGFIELD, MASS.—A franchise has been granted to the Berkshire Street Ry. Co., Pittsfield, by the Bd. of Aldermen to connect the Pittsfield Street Ry. on the south side of the park in Springfield and at Coltsville C. I. Richmond is Gen. Mgr.

JAMESTOWN, N. Y.—Definite steps are being taken for the formation of a company to build an electric railway between Jamestown and Dunkirk, N. Y., and Lake Erie, via Gerry, South Stockton, Centralia, Cassadaga, Lilly Dale and Laona. V. E. Peckhaven, Orsell C. Price and Robt. M. Garfield are interested and are organizing the company.

OSSINING, N. Y.—The Public Service Commission has been applied to by the Hudson River & Eastern Traction Co. for authority to issue $50,000 additional capital stock and $850,000 in bonds. The company is contemplating extending its railway from the present terminus in Ossining to White Plains, a distance of about 14 miles. Wilder Stratton, Ossining, N. Y., is Gen. Mgr.

CALDWELL, N. J.—The citizens of this place and Pine Brook are contemplating the construction of an electric railway between Caldwell and Denville, a distance of 15 miles. William Kerris, Pine Brook, N. J., is interested.

BERLIN, PA.—The construction of an electric railway is being contemplated by H. G. Kaylor and associates to connect Berlin, Somerset and Garrett. Surveys are being made.

EAST BRADY, PA.—The construction of an electric railway from Clarion to Reidsburg has been decided upon. The distance is about seven miles. F. W. Patterson, Chief Engr., Wilson Bldg.

RICHMOND, VA.—The construction of an electric line from Washington to Richmond is contemplated by the Washington-Virginia Ry. Co. R. W. King, Philadelphia, is Gen. Mgr.

FAIRMONT, W. VA.—The Fairmont & Clarksburg Traction Co. has commenced a survey for the extension of its tracks to Northview, a distance of 1½ miles.

GRAFTON, W. VA.—The County Court of Tyler County has approved the plans and profiles of the proposed extensions of the Grafton Traction Co. in two directions, one by way of McGraw Ave., and the other over the old Wabash right-of-way, to Fetterman Bridge, thence to Pruntytown by way of Simpson and Windell. The court's approval is granted on condition of the completion of the proposed extension within 24 months.

SISTERVILLE, W. VA.—The contract has been awarded to COL. T. MOORE JACKSON, Clarksburg, W. Va., for the construction of the Middle Island R. R. to connect Sistersville and Middlebourne a distance of 11 miles.

COVINGTON, KY.—The City Council has been applied to by the Covington, Big Bone & Carrollton R. R. Co. for a franchise to extend its tracks in the lower section of Covington. The company is also contemplating the construction of a railway from Covington and Big Bone, a distance of 22 miles. M. J. Crouch is interested in the company.

MASSILLON, OHIO.—The construction of an electric railway from Massillon, Ohio, south to Brewster, is contemplated by the Massillon & Brewster Air Line. The distance is about eight miles.

CHICAGO, ILL.—The Chicago City Ry. Co. is making preparations to extend its railway from the Sixty-third St. line through the Stickney tract, connecting with the Chicago & Joliet Electric Ry., near the plant of the Corn Products Refining Co.

EAST ST. LOUIS, ILL.—The Southern Traction Co. of Illinois has recommenced construction of its 30 miles of track in East St. Louis, St. Louis and Belleville. The road, to be operated electrictly, runs through a good coal and manufacturing districts of Illinois and has freight and passenger loops in the down town district of St. Louis, connecting with the St. Louis Municipal "Free" bridge. About half of the grade is finished and some track laid in East St. Louis and Belleville. Estimate of cost of roadbed is $700,000. The East St. Louis Engineering Co., Cahokia Bldg., East St. Louis, Ill. are engineers for the East St. Louis and St. Louis work. Harper Bros., Sexton Bldg., East St. Louis, Ill., are engineers for the Belleville work.

LEAVENWORTH, KAN.—The construction of an interurban line is contemplated by the Atchison Ry., Light & Power Co. This line will connect Atchison, St. Joseph, Leavenworth, Kansas City, Topeka and Wichita.

ST. LOUIS, MO.—The United Rys. Co. will build an extension of the University Line to Pennsylvania Ave., in St. Louis County. Robert McCulloch is Pres.

DALLAS, TEX.—The Dallas Standard Traction Co. has filed charter to build street and interurban railways. The incorporators are: E. L. Lancaster, J. B. Martin, R. A. Graves and W. G. Siler

TEXARKANA, TEX—Several extensions to its street car system to suburban districts are contemplated by the Texarkana Gas & Electric Co. R. G. Stewart, Texarkana, Tex., is Supt.

PUEBLO, COLO.—Surveys are now being made to secure the right-of-way for a line from Pueblo, Colo., east of La Junta, a distance of about 70 miles. J. S. Vail, of Puebio, is interested.

SEATTLE, WASH.—The contract has been awarded to the SEATTLE-TACOMA SHORT LINE CO. to clear the right-of-way for its proposed electric railway between Youngstown and Buren Lake. J. B. Murphy is Pres.

SPOKANE, WASH.—It is reported that negotiations are under way by the Spokane Traction Co. to extend its Corbin Park line northwest and beyond the city limits, about two miles. The cost is estimated at about $30,000.

LOS ANGELES, CAL.—The Pacific Electric Ry. Co. will extend its new La Habra line 2½ miles further east, beyond Yorba Linda.

ROXBURY, UTAH.—A proposition has been endorsed by the Commercial Club of Roxbury for the construction of an electric interurban railway from Roxbury to St. Anthony.

CALGARY, ALTA.—Bids will be received by the Commissioners of the City of Calgary until Nov. 12 for furnishing material and equipment for extensions to the municipal street railway system. Plans and specifications may be obtained at the office of W. D. Spence, City Clerk.

LONDON, ONT.—A charter has been granted to the London & Northwestern Ry. Co. to construct an electric interurban railway between London and Sarnia, a distance of 114 miles. Work is expected to commence soon on the road. The company's capital is $500,000. Daniel A. Stewart is interested.

TORONTO, ONT.—This city will give, before Dec. 31, notice of its intention to take over that portion of the Mimico branch of the Toronto & York Radial Ry. which is within the city limits. The distance is about 1 1-10 miles. The franchise expires on Dec. 31, 1911.

LIGHT AND POWER PLANTS.

(* *Denotes that this work is advertised in Engineering News.*)

BIDDEFORD, ME.—The contract for lighting the streets for five years has been awarded to the YORK LIGHT & HEAT CO.

LEWISTON, ME.—The Union Electric Co., Lewiston, is preparing preliminary plans for the construction of a hydro-electric development at Clarks Rips, Lewiston, to develop about 20,000 HP., which will be transmitted to Lewiston and Auburn, a distance of about ten miles, for industrial purposes. The old Googin dam, located about a mile below the site of the proposed dam, will be repaired and used to generate power to operate the machinery during construction.

HOLYOKE, MASS.—The Board of Public Works is considering the installation of tungsten lamps for street lighting.

BOSTON, MASS.—The New York, New Haven & Hartford R. R. Co. has awarded the contract for equipping the Hoosac tunnel, about five miles long, for electrical operation, to the WESTINGHOUSE ELECTRIC & MFG CO., Board of Trade Bldg., Boston. The contract includes complete equipment of the tunnel and erection of a power plant capable of generating sufficient power to handle all trains at that point. Estimated cost, $1,000,000. Work will begin at once.

REVERE, MASS.—Bids will be received by the Special Committee until 8 p. m., Nov. 2, for heating and ventilating apparatus for a new school building on Maiden St. The work consists of furnishing and installing a single mechanical plant, including fan and steam boilers and all necessary piping and apparatus. Theodore W. Gillette is Secy.

NEW HAVEN, CONN.—Bids will be received until Oct. 28 by the Board of Education for electric lights for the New Haven High School. G. T. Hewlett is Secy.

NEW YORK, N. Y.—Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until Nov. 16, for furnishing, delivering and installing electric control cables in underground ducts, from the South St. High Pressure Pumping Station to the gate valve vaults in New Chambers St., east of New Bowery, and in East Houston St., east of Bowery, and for furnishing, delivering and installing motor operated gate valves, subsidiary ducts, etc., with all appurtenances complete, in the high pressure fire service mains in New Chambers St., east of New Bowery, and in East Houston St., east of Bowery, Boro. Manhattan.

BALDWINSVILLE, N. Y.—Contract has been awarded by Gaggin & Gaggin, Archs., University Block, Syracuse, to D. E. WADSWORTH, Fulton, N. Y., for the erection of a power-house here for the Seneca Power Co., of brick construction with a composition room, one story, 80 × 50 ft.

HUDSON, N. Y.—Contracts for power-house equipment for the New York State Training School for Girls have been awarded as follows: For steam work, to the R. T. FORD CO., at Rochester, $33,775; for electrical work to the NEW YORK CONSTRUCTION CO., 1328 Broadway, New York, $11,524. Bidders noted on Oct. 20.

ROCHESTER, N. Y.—See item under Manufacturing Plants.

WILLIAMSVILLE, N. Y.—The Village Board of Trustees has granted a franchise for electric lighting and furnishing electric current for power to George E. De Galia, Buffalo.

TROY, N. Y.—The Geer Hydroelectric Co. will build a power plant on Burden Pond here, to be completed by spring. Steel flume, 42-in. diameter, will connect Smart Pond and Burden Pond. There is a fall of 75 ft. between the two ponds. The plant will probably generate 300 HP. Address William C. Geer or James A. Burden.

NEWARK, N. J.—The Common Council has adopted a resolution providing for the extension of the City Hall lighting plant.

BERNARDSVILLE, N. J.—The Bernardsville Water Co. has offered to furnish electric incandescent lamps of 30 c. p., instead at $15 each per year. The company also agrees to keep fixtures and lines in repair and to renew lamps without charge.

*SOUTH RIVER, N. J.—Bids will be received by the Borough Council until 8 p. m., Nov. 28, for electric light, power pumping plant and transmission line. For details see advertisement in this issue. W. W. Young is Consult. Engr., 220 Broadway, New York; 46 Park St., Bordentown, N. J., and Drexel Bldg., Philadelphia, Pa.

HARRISBURG, PA.—Bids were opened by the Commissioners of the Water and Light Dept., John A. Affleck, Pres., on Oct. 18, for gas power and electric power pumping machinery at the high-service pumping station. Contract has been awarded to the BIRDSBORO FOUNDRY & MACHINE CO., Birdsboro, Pa., at $15,500. The work consists of one gas power and one electric pumping engine with all piping and appurtenances complete; pumping engines of 1,000,000 gallons each per 24 hours, designed by Charles A. Hague, 52 Broadway, New York, one to be driven by Nash gas engine power end, and one by electric drive. Others bidders were: Otto Gas Engine Co., Philadelphia, $14,368; Deane Steam Pump Co., Holyoke, Mass., $12,375.

*ANNAPOLIS, MD.—All bids received Oct. 1 by the Navy Department for power plant completion at the U. S. Naval Academy, Annapolis, have been rejected. New bids are asked until Nov. 12 as noted last week. List of bidders noted on Oct. 13.

WASHINGTON, D. C.—Bids were opened on Oct. 19 by the Commissioners of the District of Columbia, Washington, for installing an electric lighting system and clock and bell system at Western High School, as follows: Kluckhuhn & Bro., Washington, $3,150; National Electrical Supply Co., Washington, $4,141; Capital Electric Co., Washington, $4,350; McCay Engineering Co., 9 East Lexington St., Baltimore, Md., $4,288; Carrol Electric Co., Washington, $3,545.

Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, until 3 p. m., Nov. 9, for furnishing and installing lighting fixtures in the U. S. buildings at Athens, Ohio; Davenport, Iowa; Houston, Tex.; Lake Charles, La.; Lancaster, Ohio; New Brunswick, N. J.; New London, Conn.; Salisbury, N. C.; Toledo, Ohio, and Statesville, N. C.

HIGHLAND PARK (Richmond post-office), VA.—The Virginia Ry. & Power Co. has been granted a franchise by the Town Council to construct and operate an electric light system here. G. H. Whitfield is Gen. Supt. Light and Power.

WYTHEVILLE, VA.—The Stone Electric Light & Power Co. is preparing to make improvements to its electric plant. A steam plant will be installed at the plant of the Wytheville Mfg. Co., in addition to the hydro-electric plant. William Waller is Engr. Power Station.

*NORFOLK, VA.—Bids will be received by the Board of Control until 12:30 p. m., Nov. 19, for the design, furnishing and installing three electrically driven centrifugal pumps at Colley Ave. sewer pumping station, as follows: One 2,000 gallons, one 3,000 gallons and one 4,000 gallons. W. T. Brooke is City Engr.

BETHANY, W. VA.—Bethany College is considering the erection of a new dormitory and the installation of electric power and heating plants. The electric plant will supply electricity for lighting the town of Bethany and the college.

SMITHFIELD, N. C.—The city will construct an electric light plant. Bids will be received until Nov. 1. James A. Wellons is Mayor.

WILLIAMSTON, N. C.—The contract for lighting the town by electricity has been awarded to the VIRGINIA-CAROLINA PEANUT CO., Williamston.

DALTON, GA.—Bonds for $125,000 have been sold by the city for improvements to the municipal electric light plant and other improvements. H. S. Jaudon, Savannah, Ga., is Consult. Engr.

SANFORD, FLA.—The city will install, it is reported, additional machinery in the electric light plant. Estimated cost, $20,000.

LAKELAND, FLA.—The Board of Public Works, C. W. Deen, Chn., will receive bids until Nov. 10 for improvements to the electric light and water-works plant. William L. Lyon is Consult. Engr., 305 Duvall Bldg., Jacksonville, Fla.

FORT MEADE, FLA.—The City Council has granted a franchise to S. T. Rivers for an electric light and power plant.

NORTH BIRMINGHAM (Birmingham post-office), ALA.—The City Council has decided to spend $3,000 for improvements to the light plant and water-works. Maury Nicholson is City Engr.

BIRMINGHAM, ALA.—The contract has been awarded to the BIRMINGHAM RY., LIGHT & POWER CO. for arc lights at $70 per arc per year.

MOBILE, ALA.—The contract for installing electric fixtures in the municipal building has been awarded to the MOBILE ELECTRICAL CO., Mobile.

NEW ORLEANS, LA.—Bids will be received by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Dec. 3, for two 300-HP. boilers, piping, economizer, flue, boiler, feed pumps, motor generator set wiring, etc. at the U. S. Naval Station at New Orleans. R. C. Holliday is Ch. of Bureau.

SHELBYVILLE, TENN.—The sum of $20,000 or $30,000 will be spent in improvements to the water and light plant, including the installation of four new water wheels, a 400-KW. generator, concrete penstocks, power-house, etc., from plans by the Solomon-Norcross Co., Atlanta, Ga.

COLUMBUS, OHIO.—The Fifth Ave. Ry. & Light Co., which proposes to run a cross-town line in East and West Fifth Ave., is planning to erect a power plant in West Fifth Ave., near the Hocking Valley R. R. tracks.

TOLEDO, OHIO.—Contract, it is reported, has been awarded to A. BENTLEY & SONS, 37 North Huron St., Toledo, for a new sub-power house at 408 Front St., East Side. Estimated cost, $15,000. Bacon & Huber, Spitzer Bldg., are Archs.

INTERLOCHEN, MICH.—Harlin Brown is preparing plans for the construction of a hydro-electric power plant here for supplying electricity for lamps and motors in the towns of Mesick, Buckley, Wexford, Glangarry, Harrietta, Interlochen and Traverse City and surrounding districts.

BAY CITY, MICH.—The State Railroad Commission has granted permission to the Bay City Power Co. to issue bonds for $500,000 for extensions to its system, including the purchase of additional machinery.

*GRAND RAPIDS, MICH.—Bids will be received by the Board of Public Works, Samuel A. Freshney, Secy. and Gen. Mgr., until 8 p. m., Nov. 3, for two arc generators, direct connected to one motor, with an alternative proposition for six 50-light, series rectifier systems complete.

CHICAGO, ILL.—Contract has been awarded for the steam heating contract for an $80,000 power house at East Ravenswood Park and Berteau Ave., for the Progress Co., to WILLIAM A. POPE, 80 Lake St., Chicago.

STREATOR, ILL.—The W. H. Schott Co., Chicago, Ill., it is reported, has purchased the plant and holdings of the D. Heenan Lighting Co., and it is understood will extend the heat and lighting systems throughout the city.

BELVIDERE, ILL.—The City Council is considering the construction of a municipal electric plant.

PRAIRIE DU SAC, WIS.—The Wisconsin Power Co. is preparing for the construction of a large hydro-electric power plant here, on the Wisconsin River. Magnus Swenson, Madison, Wis., is Pres.

MAGNOLIA, IOWA.—The citizens on Oct. 11 voted to grant an electric light franchise to the Bullock Service Co., Omaha, Neb. E. A. Bullock is Pres., Omaha.

DECORAH, IOWA.—The contract for the construction of a gas plant here, has been awarded to the AMERICAN CONSTRUCTION CO., Newton, Iowa, at $27,500.

DULUTH, MINN.—Four contracts for putting in water and gas connections in portions of Hammond, Weeks, John and Baxter Aves., were awarded on Oct. 12 to STACK BROS., at $6,808.

AUSTIN, MINN.—The Electric Light and Water Board has awarded contract to the ALLIS-CHALMERS CO., Milwaukee, Wis., for a 750-KW. generator at $17,600.

COLERAINE, MINN.—The Oliver Iron Mining Co. is planning to supply electricity for industrial purposes here and to neighboring towns.

MANHATTAN, KAN.—The Rocky Ford Milling & Power Co., now operating a power plant on the Blue River, four miles north of here, has been reorganized under the name of the Blue River Power Co. Plans are being made to increase the output of the power house to 1,000 HP. Machinery has been purchased. The plant furnishes electricity for operating the Rocky Ford mill and also to this city.

OMAHA, NEB.—All bids for installing electric wires and conduits for power and light wires and for telephone conduits for the Douglas County court-house, opened on Oct. 10, have been rejected. Noted on Oct. 13.

SPALDING, NEB.—Bids will be received until 8 p. m., Oct. 28, by E. M. O'Keefe, Village Clk., for the installation of an electric lighting system.

OMAHA, NEB.—D. M. Haverly, County Clk., will receive bids until noon, Oct. 28, for the electric wiring and power and light conduits for the court house. John Latenser is Arch.

FORT D. A. RUSSELL, WYO.—Bids are asked by Capt. F. S. Armstrong, Constr. Q. M., U. S. A, Cheyenne, Wyo, until 9.30 a. m., Oct. 28, for the installation of a steam heating plant in subsistance storehouse, Fort D. A. Russell.

LIBBY, MONT.—Plans are being considered for the installation of an electric light plant, water-works and telephone systems here. Estimated cost, about $100,000.

CLINTON, MONT.—The Triangle Mining & Developing Co., Missoula, Mont., is preparing for the installation of machinery for a 100-ton concentrating plant on its property here. All the machinery will be equipped for electric motor drive. Electricity for operating the plant will be secured from the Bonner plant of the Missoula Light & Water Co.

KING CITY, MO.—Fred Thompson, it is reported, has submitted a proposition to the City Council to install an electric light plant.

COLUMBIA, MO.—The city has engaged M. E. Fawkes as engineer in charge of improvements to the electric light plant and water-works. The improvements to the electric light plant include the erection of a building and boiler plant, changing arc light to magnetic system, rearrangement of street lighting system, installing 750 electric generating plant, comprising new 500-KW. high-pressure steam turbine generating unit and 250-KW generating unit. Bonds for $125,000 have been voted.

LITTLE ROCK, ARK.—The city has awarded contract to LOFTIS COLLAMORE, Little Rock, for constructing an electric light plant at the foot of Broadway, 42 x 100 ft.; capacity for 1,000 lights. Estimated cost, $7,500. William L. Rogoski is Chn. Electrical Com.

TEXAS CITY, TEX.—The Texas City Transportation Co., has authorized installation of another 500 KW. electrical generator; H. B. Moore is Gen. Mgr.

PALISADES, COLO.—The Mutual Light, Power & Telephone Co., has applied to the City Council for a 20-year franchise to furnish electricity for lamps and motors here. The company contemplates the erection of a plant at the Farmer's Mine, east of the town, to supply electricity in Palisades and Clifton and to the farms and orchards between the two places. The company agrees to turn the plant over to the city at any time after an appraisement has been made and also that the maximum charge for energy for lamps shall not exceed 10 cts. per KW. hour. Capital stock, $50,000. The incorporators are: H. H. Younger, H. R. Hough, C. Crew, H. L. Davis and others, all of Palisade.

SEATTLE, WASH.—The city is considering plans for the construction of an auxiliary power plant to generate 2,000 HP. on the shore of Lake Union. Power for operating the plant will be supplied from the Volunteer Park reservoir. A reservoir of about 200,000 cu. ft. capacity will also be built. R. H. Thomson is City Engr.

SPOKANE, WASH.—According to the San Francisco "Call," the Washington Water Power Co., is preparing to build a large electric plant, capable of developing 75,000 HP., with a dam, 150 ft. high, built between natural granite walls, 300 ft. high.

PORTLAND, ORE.—The Mount Hood Ry. & Power Co., Portland, will complete construction work undertaken about two years ago. The complete project involves three power plants of a combined capacity of 66,000 HP. and 25 miles of electric suburban railway. The construction now under way includes the railway running eastward from Portland and the first power development of 16,000 HP. It is expected to deliver power in Portland next August, as a considerable amount of construction and machinery manufacturing has already been done. Smith, Kerry & Chace are Engrs., W. P. Bremerton, of the above firm, is Designing Engr. and J. B. Goodwin is Supt. of Construction.

LOS ANGELES, CAL.—The High School Board of Los Angeles City High School District will receive bids until 3 p. m., Nov. 3, for furnishing all labor and material for electric light fixtures for lighting Auditorium, Household Arts, and Science buildings, of Hollywood High School, also for furnishing and installing in Manuel Arts High School, electric fixtures and lamps. N. S. Averill is Secy.

SANTA ANA, CAL.—Bids will be received until 5 p. m., Nov. 7, for one heating plant for the City Hall. Bidders to furnish plans and specifications with their bids. Ed. Tedford, is City Clk.

RICHMOND, CAL.—The California Gas & Electric Co., has bought a site at Fifth St. and Chanslor Ave. for gas receiving reservoirs in this city.

PORTERVILLE, CAL.—The Porterville Interurban Electric R. R. Co., it is reported will erect a power plant on the Cinder Ranch to supply electricity to operate its proposed electric railway. The system will radiate from Porterville.

REDWOOD CITY, CAL.—The residents of Menlo Park and Fairs Oaks, near here, have organized a lighting district and will establish an electric lighting system.

SANTA BARBARA, CAL.—The Santa Barbara Gas & Electric Co., is making preparations for the construction of a transmission line, carrying 10,000 volts from its power station on Castillo St. to the substation in Montecito. Estimated cost, $10,000.

PALO ALTO, CAL.—The Board of Public Works has adopted specifications for transformers for the municipal electric light plant. Bids will be asked.

PHOENIX, ARIZ.—The Water Users' Association has had plans prepared for the electrical equipment necessary for the establishment of a power plant.

TUCSON, ARIZ.—The Great Western Power Co., H. H. Sinclair, Gen. Mgr., San Francisco, Cal., is preparing for the construction of a reservoir and power development in Sabino Canyon. The work will include the construction of a tunnel to divert the water for the construction of the dam. Estimated cost, about $1,000,000. W. B. Alexander is Consult. Engr.

PRESCOTT, ARIZ.—The Arizona Power Co. is considering the erection of a new transmission line from Jerome to Fossil Creek, 163 miles in length. The company is also preparing to start up a 300-HP. compressor, which will make a total of 2,300 HP. furnished by the Arizona Power Co. Estimated cost of transmission line, $100,000. M. V. Watson is Mgr., Prescott.

CARSON CITY, NEV.—Brunswick mill, site and power site with water rights has been taken over by the Western Smelters Corporation. A large reservoir will be built and power plant to supply power to the new smelter.

SHERBROOKE, QUE.—Ross & Holgate, Montreal, Que., are preparing plans for the construction of a new power house on the Magog River, to develop about 3,000 HP.

MAISONNEUVE, QUE.—The City Council has awarded the contract for street lighting to the DOMINION LIGHT, HEAT & POWER CO., for a period of ten years. The company agrees to supply arc lamps of 2,000 c. p. at $80 each per year.

MONTREAL, QUE.—The Shawinigan Water & Power Co., is making preparations for an increase in the output of its power plant on the St. Maurice River at Shawinigan Falls. The work will include cutting out a section of the side of the intake canal 1,000 ft. long and erecting a concrete and steel bulkhead at an angle of 60° to the present bulkhead. From this extension five steel penstocks each having a capacity of 15,000 HP. will be carried to the power house to be erected on the lower level, on which there will be a head of 150 ft. The power house equipment will include five units, consisting of turbine water wheels direct-connected to electric generators. R. S. Leloch, is Consult. Engr., Montreal.

ZARAGOZA (Pueblo), MEX.—Contract, it is reported, has been awarded to G. & O. BRANIFF & CO., Mexico City, Mex., for a 250-HP., 900 r.p.m., Pelton Francis turbine complete, with oil pressure governor and all accessories for the hydro-electric plant to be located 3½ miles from here, to supply electric lighting for the city. To the water-wheel will be coupled a 125-KW. Westinghouse generator, supplying energy at 3,300 volts. Other apparatus will include an exciter, switchboard, lightning protection apparatus, etc.

GUADALAJARA, MEX.—H. H. Hinkle, Guadalajara, has awarded contract for electrical equipment for the new packing house being constructed here to G. & O. BRANIFF & CO., Mexico City. Equipment will include Westinghouse alternating current motors which will be driven from the local power company's circuit. Between ten and fifteen motors will be installed at first. All of the motors will be the new Type "MS" mill motors arranged for driving the various machines, such as tankage mill, fertilizer, dryer, killing beds, shops, lard roll, horn saw, clay kettle etc. The water supply for the power-house as well as the condenser water and sewage, will all be taken care of by "Enke" pumps, driven by Westinghouse direct-connected motors.

BRIDGES.

BOSTON, MASS.—The contract has been awarded to GEORGE T. RENDLE for painting the Charleston Bridge draw at $3,850.

HARTFORD, CONN.—The contract has been awarded to F. ARRIGONI & BRO. to rebuild the abutments for the bridge on the Valley division at North Cromwell. Fred. L. Ford is City Engr.

NEW LONDON, CONN.—The [illegible]ntract has been awarded to MAYOR B. F. [illegible]AHAN, for the construction of a bridge [illegible]ross Four Mile River.

PUTNAM, CONN.—The cont[illegible] has been awarded to FRED. T. LEY C[illegible] Springfield, Mass., for the construction [illegible] a bridge spanning the Quinebaug River [illegible] Bridge St. at $17,210. There was one o[illegible] bid that of the Connecticut Engineeri[illegible] Co., Norwich, $19,175.

ALBANY, N. Y.—We are offi[illegible]y advised that bids will be received by [illegible] Stevens, Supt. Public Works, until noon, [illegible]v. 10, for the construction of a lift br[illegible] over the Erie Canal at Franklin St., Sy[illegible]se, N. Y. The cost is estimated at $40,00[illegible] Frank M. Williams is State Engr.

ALBANY, N. Y.—Plans have b[illegible] approved by the State Engineer and Su[illegible]or Williams, for the construction of [illegible] concrete bridge on Burdick Road, ove[illegible] Barge Canal. Walter Mellus is City E[illegible]

AUBURN, N. Y.—The erection [illegible] a bridge at Lizette St. is contemplated. [illegible] Thomas Wooly is City Engr.

ALBION, N. Y.—The constructio[illegible] of a new steel or concrete bridge across O[illegible] Orchard Creek at Kenyonville is contemp[illegible]ed; also one across the same stream at T[illegible] Bridges.

NEW YORK, N. Y.—The following bids were received for repairing the fender on the Willis Ave. Bridge: Wm. P. McDonald, $21,400; Phoenix Construction Co., $20,397; Goodwin Construction Co., $20,67[illegible]; Riverside Construction Co., $18,218; N. Y. State Construction Co., $19,145; Barth [illegible] Cronin, $18,490; N. Y. Submarine Contracting Co., $18,570.

MONTROSE, PA.—Surveys have been completed by the Scranton & Binghamton Ry. for a viaduct to be constructed over the Delaware, Lackawanna & Western tracks at Montrose.

NORRISTOWN, PA.—The Chamber of Commerce will ask the County Commissioners to construct jointly with the Philadelphia & Western Ry. a bridge over the Schuylkill River.

ALLENTOWN, PA.—See item under Streets and Roads.

HARRISBURG, PA.—Bids will be received by the County Commissioners of Dauphin County, Harrisburg, until noon, Oct. 29, for the repair of abutments and piers and girders for the approach of bridge over Swatara Creek, near Humelstown. Plans and specifications on file in the office of the County Comrs. D. F. Lebo is Clk.

PHILADELPHIA, PA.—The widening of the Chestnut St. bridge is contemplated. The cost is estimated at $90,000. George S. Webster is City Engr.

PITTSBURG, PA.—The construction of a bridge to connect Woods Run with McKees Rocks is contemplated. N. S. Sprague is City Engr.

WILMINGTON, DEL.—The erection of a bridge spanning the Brandywine has been decided upon by the Baltimore & Ohio R. R. C. W. Woolford is Secy.

COLUMBUS, N. C.—Bids will be received until Nov. 7 by F. M. Burgess, Clk. of the County Commissioners, for the construction of a bridge over the Green River.

ATLANTA, GA.—The Fairburn & Atlanta Ry. & Electric Co. will construct a cement bridge across Atlanta, Birmingham & Atlantic Railway tracks. W. T. Roberts, Pres., Fairburn, Ga.,

COLUMBUS, GA.—The construction of a steel bridge across the Chattahoochee River, between West Columbus and the city property is contemplated. Zach Hagedorn, West Point, Ga., is interested.

PENSACOLA, FLA.—The Pensacola, Mobile & New Orleans Ry. will construct a trestle over Appalachee River. Contracts will be awarded in about six months for draw and fixed spans of bridge to be built in connection with trestle. L. G. Wilkinson, Supt. of Construction.

TUPELO, MISS.—Bids will be received by the Board of Supervisors Court House, Tupelo, until Nov. 7, for the construction of a bridge in Town Creek bottom north of Belden on Leighton & Union Rd. Norbin Jones is Clk.

CINCINNATI, OHIO.—Bids will be received by the Board of County Commissioners, Hamilton County, until noon, Nov. 11, for the construction of a concrete bridge on Fallis Road, in Symmes Township. Stanley Struble is Pres.

COLUMBUS, OHIO.—The contract for the construction of the Long St. arch bridge has been awarded to McKEEVER ELECTRIC CO.

CLEVELAND, OHIO.—Bids will be received by the County Commissioners, Cleveland, Ohio, until 11 a. m., Nov. 2, for the construction of bridge works on the Denison-Harvard Viaduct, Newburg Township. J. F. Goldenbogen is Clerk.

YOUNGSTOWN, OHIO.—Bids will be received by the Board of Commissioners of Mahoning County, Ohio, until 11 a. m., Oct. 31, at the office of Will B. Jones, County Audr., for the construction of a bridge over Dry Run.

FINDLAY, OHIO.—The construction of bridges on the south section line of Section 13 Cass Township and on the Ridge Rd. in the Northeast quarter of Section 8 is contemplated by the County Commissioners.

GREENFIELD, IND.—Bids will be received by the Commissioners of Hancock County until 10 a. m., Nov. 7, for the construction of three bridges.

NEW ALBANY, IND.—The construction of a bridge over Silver Creek is contemplated by the Louisville & Northern Ry. & Lighting Co. M. J. Insull is Gen. Mgr., New Albany.

RUSHVILLE, IND.—Bids will be received by the Commissioners of Rush County, Rushville, Ind., until 2 p. m., Oct. 29, for the construction of three concrete bridges. Jesse M. Stone is County Audr.

INDIANAPOLIS, IND.—Bids will be received by the Commissioners of Marion County until Nov. 10, for the construction of a bridge over Williams Creek in Washington Township also for the construction of six concrete culverts and one retaining wall. Albert Sahm, Audr.

INDIANAPOLIS, IND.—Plans have been ordered by the Board of Public Works, for the construction of two bridges across Bogues Run. The appropriation is $25,000.

PETERSBURG, IND.—The Commissioners of Pike County have awarded a contract to A. H. KINMAN for the repairing of a bridge across Patoka River at $5,350.

MARTINSVILLE, IND.—The contract has been awarded to E. O. GELBERT of this city for the construction of two concrete arch bridges, at $6,031.

VERNON, IND.—The contract has been awarded to the NATIONAL CONCRETE CO., Vernon, Ind., for the construction of four bridges in Jennings County.

WAUKESHA, WIS.—The contract has been awarded to WALTER BLAKE CONSTRUCTION CO., Fond du Lac, Wis., for the construction of the proposed concrete bridge over Fox River at the foot of Broadway, at $4,960.

MILWAUKEE, WIS.—The County Board has been asked by the towns of Lake and Greenfield to assist in the building of a bridge over the Kinnickinnic River at Kilbourn Road.

MUSCATINE, IOWA.—The construction of a concrete bridge over Muscatine slough in the south end of Muscatine, Iowa, has been decided upon. C. H. Young is City Engr.

BELLEVUE, IA.—The construction of a bridge across the Mississippi at Bellevue, Iowa, is contemplated by the Chicago Great Western Ry. W. L. Petrikin is Secy.

BAGLEY, MINN.—Bids will be received by William H. Bishop, Supt. Red Lake Training School, Red Lake, until Oct. 31, for the construction of a steel bridge across the Clearwater River, Clearwater County.

POLK, NEB.—The construction of a bridge spanning the Platte River at Havens is contemplated by the citizens of Polk and Merrick County.

MISSOULA, MONT.—The City Council has received the following bids for the construction of the proposed bridge: Olson & Johnson, $9,090; S. Birch & Son Construction Co., Salt Lake City, Utah, $9,000; C. H. Chilcote, $9,880; Security Bridge Co., $12,500; C. G. Sheeley Poctatello, Idaho, $17,200. The contract has been awarded to OLSON & JOHNSON.

PLAINS, MONT.—The contract has been awarded to O. W. PEPPARD, of Missoula, for the construction of three steel bridges for Sanders County, at $125,650.

DE SOTO, MO.—Bids will be received until 10:30 a. m., Oct. 29, for repairing the bridge over Plattin Creek. John Hurtgen is Highway Engr.

SPRINGFIELD, MO.—H. G. Horton, City Engr., has been directed to advertise for bids for the erection of a reinforced concrete bridge across the Jordan, in accordance with the plans on file at the office of the engineer. The cost is estimated at $6,000.

PALESTINE, TEX.—A resolution has been adopted by the City Board of Commissioners for the construction of a substantial bridge across Crawford St., at the branch near the Palestine Lumber Co. yards.

STILSON, TEX.—Bids will be received by J. E. Berry, Chmn. of Drainage Comrs. of Old River Drainage District of Liberty County No. 1, Stilson, Tex., for the erection of a 48-ft. span wooden truss highway bridge.

RICHMOND, TEX.—The erection of a bridge spanning the Brazos River is contemplated by the citizens of this place. The estimated cost is $30,000.

TULSA, OKLA.—The contract has been awarded by the Tulsa County Commissioners to CANTON BRIDGE CO., Canton, Ohio, for the construction of a steel bridge across Arkansas River, near Bixby, Okla., at $68,970. W. L. North, Chmn. of County Comrs.

NORTHPORT, WASH.—The County Commissioners have agreed to appropriate $20,000 towards the bridge across the Columbia at this point.

BRAWLEY, CAL.—Bids will be received by the Clerk of the Board of Supervisors until 11 a. m., Nov. 14 for grading approaches to bridge, across New River at Rockwood Station. D. S. Elder is Clerk.

SAN DIEGO, CAL.—Bids will be received by the Supervisors until Nov. 10, for the construction of a bridge of two 100 ft. spans and three 40 ft. spans across the Santa Margueritа River near Ysidara. W. H. Francis, Clk.

EL CENTRO, CAL.—Bids will be received by Clerk of Board of Supervisors until 11 a. m., Nov. 14, for grading south approach to bridge across New River, south of Slisbee, according to plans on file with County Surveyor at Court-House, city; also bids will be received at same time for grading approaches to a bridge across New River, at Seeley. D. S. Elder, Clerk of Supervisors.

MERCED, CAL.—Bids will be received until 10 a. m., Nov. 9, for the construction of five concrete bridges, three to be built in Road District No. 1, and two in Road District No. 3. Plans in office of P. J. Thornton, Co. Clk. C. D. Martin is City Engr.

LOS ANGELES, CAL.—C. W. CORBARLEY, of Los Angeles, has been awarded contracts for the construction of two steel bridges for San Diego & Arizona Ry. One is a 510-ft. span over second crossing of Tia Juana River and the other 180-ft. span over Matanuco Creek.

SAN LUIS OBISPO, CAL.—Bids will be received until 10 a. m., Nov. 10, for construction of a reinforced concrete girder bridge across San Simeon Creek, about five miles from town of Cambria, according to plans and specifications on file in office of H. H. Carpenter, Clk., where same may be inspected.

UKIAH, CAL.—The following bids were received and rejected and the Board ordered that the work be readvertised, bids to be received until 11 a. m., Nov. 5, for the construction of the Russian Gulch Bridge: Homes & Stoddard, $8,986; P. Maxwell, $8,950; Healey Tibbetts Construction Co., $9,047; Keatinge Bradford, $11,614 and $14,226; J. C. Halliday, $8,966 and $9,466.

BOISE, IDAHO.—Plans have been prepared for the construction of a new bridge across the Boise River at the site of the present Ninth St. bridge. W. L. Cuddy is Clk. of Board of County Comrs. Freda Tolman is City Engr.

MONTMAGNY, QUE.—Bids will be received until Dec. 1 by A. Renaud, Secy.-Treas., for the construction of an iron bridge spanning the Riviere du Sud.

OTTAWA, ONT.—The construction of a high level bridge is contemplated spanning the canal at Bank St. The cost is estimated at $125,000.

OTTAWA, ONT.—The contract has been awarded to STEWART & HEWITSON, Port Arthur, for the construction of a steel and concrete bridge, over the Ottawa River at Ottawa. The cost is estimated at $300,000.

BUILDINGS.

(* *Denotes that this work is advertised in Engineering News.*)

WATERBURY, CONN.—Plans are being prepared by Griggs & Hunt, 51 Leavenworth St., Waterbury, for the erection of a 12-story building on North Main St. for John Porter, of Hartford.

NEW YORK, N. Y.—Plans for the proposed Bushwick High School have been prepared under the direction of C. B. J. Snyder, Supt. of Bldgs., Bd. of Education, and bids will be asked for in about 50 days. The structure will be Gothic in architecture, will be 200 ft. sq. and will occupy the block bounded by Woodbine St. and Irving, Putnam and Knickerbocker Aves., Brooklyn.

It was recently announced that Israel Lippman will erect, from plans by Schwartz & Gross, Archs., 347 Fifth Ave., two 8-story brick and stone store and loft buildings on the westerly block front in Center St., from White to Walker Sts. The structures will cost about $660,000.

Plans are being prepared by Rouse & Goldstone, 12 West 32d St., for a 13-story bank and office building at the southwest corner of Canal and Orchard Sts., for S. Jarmulowsky.

Bernstein & Bernstein, Archs., 24 East 23d St., have completed plans for the 6-story and loft building, 41.8x90 ft., to be erected at 106-108 West 32d St., to cost $50,000. L. & A. Pincus, 20 West 31st St., are the owners.

NEW YORK, N. Y.—Shaefer & Jaeger, 1910 Webster Ave., are preparing plans for the erection of five 5-story apartment houses, 45x110 ft. each, to be built on the south side of 175th St., 92 ft. east of Prospect Ave., to cost a total of $210,000. The J. W. Cornish Construction Co., of Tremont and Mapes Ave., is the owner.

Plans have been filed recently for an apartment house on the southwest corner of Park Ave. and 76th St. on a plot 102.2 x 122.6 ft. The 76th St. and Park Ave. Co., 165 Broadway are the owners. It will accommodate 36 families and will be twelve stories high. The facade will be of granite, with brick and terra cotta for the upper stories. Estimated cost $1,000,000. George and Edward Blum, 505 Fifth Ave., are Archs.

The Capital Realty & Construction Co., 103 Park Ave., is to build an 8-story apartment house, to cost $350,000, in 87th St., east of Fifth Ave., it is stated. George and Edward Blum, 505 Fifth Ave., are Archs.

Plans for the proposed twelve 5-story brick apartments which the Usona Construction Co., plan erecting, on the east side of Tiffany St., 95.3 ft. south of Westchester Ave., have been filed recently. Each house will have a 40 ft. front. Estimated cost, $336,000. Clarence S. Shumway, 989 Southern Boulevard, is Pres. and Arch.

NEW YORK, N. Y.—Whalen-Hadley, Inc., John G. Whalen, Pres., 150 Nassau St., will build two 5-story houses on the block bounded by West Farms Road, Home St. and Bryant Ave. The estimated cost is $110,000. Nast & Springstein, 21 West 45th St., are the Archs.

Plans for a 4-story brick music hall, 85.8x90.5 ft., have been filed recently to be erected on the south side of 46th St., 108 ft. west of Broadway. J. Westheim, 1016 Second Ave., is owner. Herts & Tallant, 113 East 19th St., are the Archs. Estimated cost, $120,000.

An 8-story brick office and store building for which plans were recently filed, will be erected at the southwest corner of 30th St. and Seventh Ave. The structure will be 24.9x69 ft. The Coleman Construction Co., 20 Vesey St., is the owner. Rouse & Goldstone, 12 West 32d St., are the Archs. Cost, $60,000.

NEW YORK, N. Y.—The Thompson-Starrett Co. has let the contract for fireproofing the new 40-story Municipal building, at Chambers and Center Sts., to the NATIONAL FIREPROOFING CO., Broadway and 23d St. This part of the building will cost about $300,000. The Fireproofing Company will install concrete for the first and mezzanine floors, and will supply 1,400,000 sq. ft. of hollow terra cotta block for the upper floors and for partitions and column covering. The Thompson-Starrett Co. expects to complete its contract early in 1912.

NEW YORK, N. Y.—Bids will be received by Michael J. Drummond, Comr. of Dept. of Public Charities, until 2.30 p. m., Nov. 3, for furnishing all the labor and materials required for the erection and entire completion of operating rooms and accessories in the cupola of the Metropolitan Hospital on Blackwells Island, New York.

FORT HAMILTON (Brooklyn post-office), N. Y.—Bids were received on Sept. 22, by the Constructing Quartermaster, U. S. A., Fort Hamilton, for the construction, including plumbing, heating, electric wiring and fixtures of one field officers' quarters and one 6-set officers' quarters. On Oct. 13, the contract was awarded to the AMITY CONSTRUCTION CO., 154 Nassau St., New York, at $50,750.

HEMPSTEAD (L. I.), N. Y.—Plans of I. B. Baylis have been accepted by the Hempstead Board of Education for a primary school building to cost between $75,000 and $80,000. The building will contain 16 rooms.

FAR ROCKAWAY, N. Y.—Plans have been prepared for the erection of a 3-story fire house on Fifth Ave., Rockaway Park, opposite the railroad depot. It will be of concrete and stone construction. Estimated cost, $50,000. Address the Secretary of the Board of Trade.

BUFFALO, N. Y.—Esenwein & Johnson, Archs., Ellicott Sq. Bldg., have completed plans for a 7-story store and loft building, 90x260 ft., on Broadway, near Washington St. It will be steel and frame structure of brick and stone construction.

Joseph A. Geigand, Arch., 346 Herman St., has completed plans for a 2-story and basement Theatre, 67x155 ft. of brick and structural steel, to be erected by Louis Becker at Jefferson and High Sts.

The Larkin Co., 663 Seneca St., Buffalo, is planning to build a 2-story fireproof building at 19-27 Harwood Pl., to cost, $40,000, it is stated.

WHITE PLAINS, N. Y.—Goldner & Goldberg, Archs., 704 Jackson Ave., have prepared plans for two 4-story flats, 50x90 ft., for Samuel Ellis, 704 Jackson Ave., to be built at 5 Railroad Ave., this city. Estimated cost, $60,000.

ATLANTIC CITY, N. J.—Harry E. DeHoff, 48 East 61st St., Philadelphia, Pa., is preparing plans for an apartment building here, for George W. West & Co. It will be five stories high, of brick and cut stone construction. Bids will be asked for in about four weeks, and work will be started this winter.

BRIDGETON, N. J.—The contract for erecting a store and apartment building for the Hahn Automobile Co., has been awarded to JOSEPH STEELMAN, of this city. It will be of brick and stone, three stories in height. George E. Savage, Witherspoon Bldg., Philadelphia, is Arch.

EAST ORANGE, N. J.—Hyman Rosensohn, Arch., 800 Broad St., Newark, has completed plans for two 4-story flats, 35x67 ft., to be erected at the southeast corner of Main St. and South Maple Ave. Estimated cost $40,000. Samuel Goldberg, 302 Fairmount Ave., Newark, is the owner.

EAST RUTHERFORD (Rutherford post-office), N. J.—Ernest Sibley, Arch., of Grantwood, N. J., is preparing plans for a 2-story school building 60x140 ft., to be erected by the Board of Education at Paterson Ave., Uhland and Gold Sts., East Rutherford, at a cost of $70,000. The architect is ready for bids on the general contract.

PATERSON, N. J.—Plans are being prepared by Wm. T. Fanning, Arch., Colt Bldg., for the erection of a public school to take place of Public School No. 12, for the Board of Education. It will be a 32-room structure.

*EAST ORANGE, N. J.—The following bids were received on Oct. 13, by the Board of Education, for the erection of a high school: D. J. PHIPPS, Newport News, Va., $182,594 (awarded contract); C. H. Peckworth, 415 Hudson St., New York, $191,585; W. H. Fissell, 1133 Broadway, New York, $189,239; F. D. Hyde, $178,000 (except heating); Thompson-Starrett Co., 49 Wall St., New York, $221,460; Charles Willie, $174,370; Fred. Killgus, Newark, $185,000; Bliss & Griffiths, $204,000; Industrial Engineering Co., $199,903. The American Warming & Ventilating Co., of Pittsburg, received the heating and ventilating contract, at $28,733, and D. J. Phipps' bid exclusive of heating, etc., was $153,861, making it a total of $182,594, as mentioned above.

HARRISBURG, PA.—An addition will be built to the Melrose public school here. It will be three stories high of brick construction. C. H. Floyd, Patriot Bldg., this city, will prepare the plans. D. M. Hammelbaugh, 123 Chestnut St., is Secy. of the School Board. Bids will be asked and the contract awarded this winter.

HAZELTON, PA.—Guy King, Arch., 1513 Walnut St., Philadelphia, is preparing plans for a residence in Hazelton for Alvah Markle to cost $150,000.

PHILADELPHIA, PA.—J. C. BOGGS, 5800 Cedar Ave., recently obtained permits for erecting 102 2-story houses, 14x37 ft. and 14x31 ft., on Indiana Ave., B, Elkhart and East Clearfield Sts., at a cost of $190,900.

Horace Trumbauer, Arch., Land Title Bldg., has completed plans for a 4-story brick apartment house and store building to be erected on the site of the old Neafie mansion at the northeast corner of Broad St. and Girard Ave. The property adjoins the Majestic Hotel, and is owned by George H. Earle, Jr. The building will measure 24 ft. on Broad St., with a depth on Grand Ave. to Watts St. of 160 ft. The style of architecture is Spanish, and the structure will cost about $300,000.

GEORGE MOEHRLE, 2631 North 28th St., recently obtained permits for 28 2-story houses, including two stores and dwellings, 15x42 ft., and 14.6x37 ft., on Clearfield St., and on Tulip, south of Clearfield, to cost $44,100.

PHILADELPHIA, PA.—E. Allen Wilson, Arch., Land Title Bldg., is planning a flat house 140x70 ft., to be erected in the vicinity of 52d and Market Sts., containing 9 stores and 18 flats of eight rooms each; also a 5-story storage warehouse, 50x115 ft., of reinforced concrete; also a garage, 115 x 118 ft., of fireproof construction.

GEORGE H. STUETZER, 5820 Race St., will build twenty 2-story houses, 16x52.6 ft., on Tenth St., north of Ruscomb St., to cost $60,000.

JAMES N. MITCHELL, 145 North Salford St., will build fifty 2-story houses, 16x50 ft., each at 46th and Chestnut Sts., at a cost of $200,000.

PITTSBURG, PA.—R. M. Trimble, Arch., Ferguson Block, has completed foundation plans for a 3-story brick and terra cotta building to be constructed on Butler and 45th St., for the Lawrenceville Branch Y. M. C. A. to cost $125,000. Mr. Trimble will soon take bids on foundations only.

The Building Committee of the Pittsburg Presbytery, at a recent meeting, approved the plans for the proposed dormitory for the Western Theological Seminary, prepared by Ballinger & Perrott, Archs., 1211 Arch St., Philadelphia. The structure will be erected on the site of the present Memorial Hall. Rev. Dr. James A. Kelso is Pres. of the Seminary. S. S. Marvin of Bryn Mawr, is Chn. of Com.

READING, PA.—George L. Gerhard, Arch., 619 Penn. St., has purchased a triangular plot bounded by Culvert St., Laurel and Ninth Sts., 272x600 lin. ft., for the purpose of erecting 57 dwellings.

WAYNESBORO, PA.—J. W. Woltz, Arch., of this city, has about completed plans for a proposed school building here for the School Board. The building will be of brick and stone, three stories in height, 110x116 ft., and will cost about $50,000, exclusive of equipment. The Waynesboro School Board, Jacob A. Strickler, Pres., will advertise for bids about Nov. 1.

HIGHLANDTOWN (Baltimore post-office), MD.—J. HENRY MILLER, INC., 106 Dover St., Baltimore, has been awarded the contract for the erection of a warehouse to be erected on Lombard St., between Fifth and Seventh Sts., Highlandtown, for the Monumental Brewing Co., from plans by Otto C. Wolf, Denkela Bldg., Philadelphia, Pa. It will be two stories high, of brick and stone construction, 124x44 ft. The first floor will be of concrete. Estimated cost, $75,000.

BALTIMORE, MD.—Hotel Belvidere, has purchased the site at 1023 North Charles St. and has commissioned Parker, Thomas & Rice, Archs., Union Trust Bldg., to prepare plans and specifications for an addition to the present building, 23x280 ft.

BALTIMORE, MD.—Plans are being prepared for the erection of an addition to the building of the Baltimore Trust Co. by Parker, Thomas & Rice, Archs., Union Trust Bldg. The plans call for an extension of the present building, 23 East Baltimore St., back to German St.

Charles G. Kriel Co., has awarded the contract for the erection of a modern warehouse and factory building at 5 and 7 West Henrietta St., South Baltimore, to HENRY PIERSON & SON, 1000 Goodman Alley.

CLARENDON, VA.—Charles Rauscher awarded the contract for heating and plumbing for his residence, barns and out buildings for his country place to A. J. THOLL, 124 Adams St., N. W., Washington, D. C. Plans and specifications were prepared by Milburn, Heister & Co., Home Life Bldg., Washington.

BETHANY, W. VA.—Plans are being prepared for the construction of a dormitory at Bethany College. An electric power plant is to be installed in the college, and in addition to supplying current for the college, electricity will be furnished to the town of Bethany. A new heating plant is also to be installed. Estimated cost, $50,000.

WILMINGTON, N. C.—The Directors of the Atlantis Hotel Co., J. A. Taylor, Pres., have selected Milburn, Heister & Co., Archs., Home Life Bldg., Washington, D. C., to prepare plans and specifications for their proposed $250,000 hotel. George G. Carter was the organizer of the Company.

COLUMBIA, S. C.—The Asylum Commission has purchased land in Richland County, near Columbia, for $50,000, for the purpose of erecting asylum buildings. The new site is located about six miles from Columbia on the line of the Southern R. R. to Charlotte and between the asylum and Koon roads.

MOBILE, ALA.—Plans have been completed for the construction of a station here, for the New Orleans, Mobile & Chicago R. R. Estimated cost, $50,000. W. F. Owen, is Vice Pres. and Gen. Mgr., Mobile.

TROY, ALA.—Bids were received as follows on Oct. 24, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Troy: George A. Clayton, Atlanta, $36,363; George Becking, Chattanooga, Tenn., $35,960; John F. Jenkins, Gainesville, Fla., $34,200; Algernon Blair, Montgomery, Ala., $38,850; the Newport Contracting & Engineering Co., Newport News, Va., $40,000; King Lumber Co., Charlottesville, Va., $39,700; R. E. L. Majors, Troy, Ala., $37,500.

LOUISVILLE, KY.—The Louisville Public Warehouse Co., has had plans prepared for the erection of a 2-story reinforced concrete warehouse, 80x160 ft., at Seventh and Magnolia Sts., near the Louisville & Nashville R. R. crossing. D. X. Murphy & Co., 250 Fifth St., Louisville, are the Archs.

CINCINNATI, OHIO.—The A. H. Seinsheimer Paper Co., 1118 Park St., plan to construct a 2-story warehouse on McLean Ave., near Exeter St., of reinforced concrete. Estimated cost, $50,000.

LIMA, OHIO.—Bids will be received by the Board of Commissioners for the erection of the Lima State Hospital until noon, Nov. 10, for furnishing the material and for performing the labor necessary to build the foundations for Infirmary "A"; Infirmary "B"; Women's Pavilion; and Isolation Pavilion; and also for the furnishing the materials and for performing the labor necessary to construct a storm sewer, at the Lima State Hospital, according to the plans

and specifications prepared by Frank L. Packard, New Hayden Bldg., Columbus. S. A. Hoskins is Pres. and George E. Whitney is Secy. of Bd.

OAKLEY (Cincinnati post-office), OHIO.—Bids will be received by W. E. Seilkop, Clk., Board of Education of Oakley Village School District, Oakley, Ohio, until noon, Oct. 31, for furnishing the necessary labor and material for the following subdivisions of work: cut stone work, brick masonry, slate work, marble, tile and terrazza, and heating, ventilating and temperature regulation; for the completion of an elementary school building now in course of construction on a plot extending from Madison Ave. to Webster Ave., Oakley, according to the plans and specifications on file at the office of P. E. Mossmiller, Arch. First National Bank Bldg., Norwood, Ohio.

CLEVELAND, OHIO.—It is reported that the Wheeling & Lake Erie R. R. Co., plans to erect a new depot on the site of the present Broadway station. H. T. Douglas, Jr., is Ch. Engr., Cleveland. Estimated cost, $250,000.

Bids are asked until Nov. 7, by Charles Orr, Div. of Schools, for the construction of a school building at Cleveland.

COLUMBUS, OHIO.—R. H. EVANS & CO. of Zanesville will erect the proposed dining hall at the Ohio Penitentiary, Columbus. It is to cost $150,000, with full equipment, which the company is to furnish.

PORTSMOUTH, OHIO.—Elzner & Anderson, Archs., Ingalls Bldg., Cincinnati, have been commissioned to prepare plans by the First National Bank, for an 8-story reinforced concrete structure, at Portsmouth.

TOLEDO, OHIO.—Bids will be received by the Board of Education, until Dec. 5, for the erection of two high schools. Franklin Macomber is Pres. and W. B. Guitteau is Supt.

BLOOMFIELD, IND.—Bids will be received by E. E. Neal as soon as plans can be made, for the construction of a business block on the west side of the public square.

INDIANA HARBOR, IND.—The Indiana Harbor Belt Warehouse and Forwarding Co., has been incorporated with a capital stock of $10,000, to build, equip and operate a warehouse for the storing of merchandise, etc. Peter W. Meyer, F. W. Hagen and W. J. Gorman are Dirs.

INDIANAPOLIS, IND.—Eli Lilly & Co., chemists, 210 East McCarthy St., have ordered plans for the construction of a building at Alabama and Norwood Sts., to cost about $50,000.

F. W. Sanders, 1104 Prospect St., has ordered plans for the construction of a theatre building at Prospect and Shelby Sts. The building, for which bids will soon be invited, will be a 3-story brick structure, with store rooms and theatre on first floor and office rooms above.

OTIS, IND.—The School Trustees have ordered plans and will ask for bids as soon as they are completed, for the construction of a brick school building here.

TERRE HAUTE, IND.—Hulman & Co. will soon ask for bids for the erection of an addition to their wholesale house and also for the construction of a large tunnel. The building will be seven stories high.

BATTLE CREEK, MICH.—Osgood & Osgood, Widdicomb Bldg., Grand Rapids, have been selected to prepare plans for the proposed building for the Masonic Temple Association of Battle Creek.

LANSING, MICH.—E. A. Bowd, Arch., and C. E. Smith, Engr., of Lansing, have been commissioned to prepare plans for a hospital and nurses home for the proposed Lansing Hospital. H. H. Larned is Chn. of Plans Committee, 105 Washington St. The buildings are to be three stories and basement; of reinforced concrete construction and will cost $100,000.

CHICAGO, ILL.—Edward I. Bloom, 5346 Jackson Ave., has purchased from Mrs. Martha J. Candee, the residence property at the northwest corner of Woodlawn Ave., and 46th St., 110x194 ft., for $25,000, and will erect thereon an apartment house, it is stated to cost $100,000.

The Lithuanians will establish a new church and school in the property known as the Grant Locomotive Works subdivision in the southwestern part of the city. The project involves probably $150,000. For this purpose the Catholic bishop has purchased from F. H. Bartlett & Co., twelve lots, or one-half block of land, at the southeast corner of West 15th St., and South 50th Ave., on which it is the intention to erect the church and school building at once.

L. S. Stanhope, Arch., 184 La Salle St., has awarded the electrical contract to FREEMAN-SWEET CO., 354 Dearborn St., for a $100,000 church at 44th St. and Michigan Ave., for the Eighth Church of Christ, Scientist.

Shattuck & Hussey, Archs., 153 La Salle St., have awarded a contract to HENRY SHENK CO., of Erie, Pa., for a 7-story Y. M. C. A. Bldg., 70 × 150 ft., to cost $175,000. It will be of steel, tile, terra cotta and brick fireproof construction

H. R. Wilson & Co., Archs. 218 La Salle St., are receiving estimates for alteration work for a bank building at Halsted and Madison Sts. for the Midland Bank. The work is to consist of new bank front, marble work and bank furniture.

The Pennsylvania R. R. Co., has purchased five acres south of Polk St. for an extension of its freight terminal. The improvement is said to be part of the company's project to build a $20,000,000 passenger station on the site of the Union Station at Canal and Adams Sts. The price was $1,800,000, or $8 a sq. ft. H. R. Leonard is Engr. of Bldgs., Philadelphia, Pa.

ROCKFORD, ILL.—Pond & Pond, Archs., 17 Van Buren St., have awarded the plumbing contract to J. J. DWYER for a girl's dormitory for the Rockford College at Rockford. Estimates for steam heating are now being received. Noted on Oct. 6.

ELMHURST, ILL.—Patten & Miller, Archs., 140 Dearborn St., have awarded the masonry, cement work and fireproofing contract to the STODDARD CONSTRUCTION CO.; heating to LEWIS & KITCHEN, 1200 Michigan Ave., Chicago; plumbing and wiring to M. ROBBINS, of Elmhurst; sheet metal and roofing to H. D. YELDHAM, 269 West Van Buren St., Chicago; plastering to CHARLES PALMQUIST; structural iron work to the DUFFIN IRON WORKS, 4001 Wentworth Ave., Chicago; ornamental iron to the WESTERN ARCHITECTURAL IRON WKS., and painting to J. G. McCARTHY, 1832 Wabash Ave., Chicago, for a $45,000 grade school at Elmhurst.

HARVEY, ILL.—Marshall & Fox, Archs., 164 Dearborn St., Chicago, are preparing plans for a $100,000 high school at Harvey.

OAK PARK, ILL.—Patten & Miller, Archs., 140 Dearborn St., Chicago, have awarded the masonry contract to HARPER & BUTTENDORFF, of Oak Park, for a 5-story furniture warehouse, 75x100 ft., at Euclid and East Aves., Oak Park, for the Oak Park Storage & Van Co. It will be of brick construction with steam heating.

MILWAUKEE, WIS.—Preparations are being made by the local post of the Salvation Army to erect a new building, to cost between $40,000 and $50,000. D. Levine is Supt. of the Milwaukee District.

BELOIT, WIS.—Nimmons & Fellows, Archs., 204 Dearborn St., Chicago, Ill., have completed plans for an office building to be erected by the Berlin Machine Works, in Beloit. It will be three stories high, 55 × 121 ft., of brick with Bedford stone trimmings, with pneumatic tubes, vacuum cleaning system, etc. Bids are now being received.

AMES, IOWA.—Bids will be received at the office of D. A. Emery, Secy., of the State Board of Education, Capitol Bldg., Des Moines, until 2 p. m., Nov. 3, for the erection and completion of a group of six buildings for the use of the veterinary department, Iowa State College, at Ames, plans and specifications for which may be seen at the office of the Superintendent of Construction at the college and at the office of Proudfoot, Bird & Rawson, Archs., Flynn Bldg., Des Moines.

IOWA CITY, IOWA.—Bids will be received by D. A. Emery, Secy., of the State Board of Education, Capitol Bldg., Des Moines, Ia., until 2 p. m., Nov. 3, for the erection and completion of the northeast wing of the State University Hospital, at Iowa City, plans and specifications for which may be seen at the office of the Superintendent of Construction, Iowa City, and at the office of Proudfoot, Bird & Rawson, Archs., Flynn Bldg., Des Moines.

KEOKUK, IOWA.—Plans are being prepared for a building for the Keokuk B. P. O. Elks here. Estimated cost, $40,000.

ROCHESTER, MINN.—The State Board of Control, Charles Halvorson, Chn., St. Paul, has awarded the contract for the construction of a group of four buildings at the Rochester State Insane Hospital to OTTO NEITGE, Mankato, Minn., at $83,000. Detention, isolation and tubercular hospitals will be built and a dairy barn, all of brick and concrete. C. H. Johnston, St. Paul, is State Arch.

*WILLMAR, MINN.—Bids were received as follows on Oct. 24, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Willmar: James H. Olsen, Willmar, Minn., $39,777; Andrew Bjorsell, Willmar, Minn., $39,777; King Lumber Co., Charlottesville, Va., $42,440; Northern Construction Co., Milwaukee, Wis., $45,500; General Construction Co., Milwaukee, Wis., $43,000; P. M. Hennessey Construction Co., St. Paul, $42,893; T. G. Hinchcliff, Chicago, $48,500.

KANSAS CITY, MO.—A "Temple of Light," is to be erected here, to cost $500,000, according to reports. Dr. C. H. Carson is interested. It is to be four stories high, 210 ft. sq., with a dome, 166 ft. high. The site is under consideration.

ST. LOUIS, MO.—The Crane Co., 16th and Walnut Sts., has purchased a lot, 150 × 150 ft., at Eleventh and Gratiot Sts., for $40,000, and will erect a warehouse to cost $250,000, it is stated.

HOUSTON, TEXAS.—The exchange to be erected on the Sewall property by the Southwestern Telegraph & Telephone Co., as noted on Oct. 6, will be 50 × 125 ft., of reinforced concrete construction. Two elevators will be installed. The cost is estimated at $125,000. F. W. Yensen is Engr.

DEMING, N. MEX.—Bids will be received by the School Board, until noon, Nov. 4, for the construction of a high school building at Deming. Frost & Frost, P. O. Box 27, El Paso, Tex., are the Archs. P. M. Steed is City Clk.

ABERDEEN, WASH.—Gould & Champney, Archs., American Bank Bldg., Seattle, expect to finish plans for one wing of the addition to the Wabash Hotel at Aberdeen soon. As soon as these are completed they will proceed with the drawing of plans for the second wing. The first wing will cost about $20,000 and the second, about $40,000.

SEATTLE, WASH.—James T. Kelly, a pioneer mining man of Dawson, proposes to build an apartment house, to cost in the neighborhood of $200,000, on his property at Fourth Ave. and Virginia St., some time next year, it is reported.

At the annual conference of the Methodist Episcopal Church South in Medford, Ore., it was voted to erect a $75,000 Methodist Episcopal Church in Seattle in the near future.

H. Ryan, Arch., Globe Bldg., has completed plans and is taking figures on the general contract for the $40,000, 3-story, brick veneer apartment building, to be erected on 13th Ave. near Mercer St. The building will be fitted throughout with hardwood floors.

WENATCHEE, WASH.—The Wenatchee Department Store, N. I. Neubauer, Prop. Hiram Harris, Mgr., has purchased a site and as soon as arrangements can be made will erect a modern department store building, of concrete and brick construction, to cost in the neighborhood of $100,000.

ECHO, ORE.—The School Board of District 5, will receive bids until Nov. 25, for the construction of a school house about five miles from Echo, plans and specifications, for which are on file in the office of the District Clk.

PORTLAND, ORE.—Plans will be prepared soon for the construction of a modern hospital building on the Peninsula, near Columbia Park. W. B. Steel, Dr. W. M. Killingsworth and others are Dir. Dr. C. S Hosmer is one of the promoters Estimated cost, $40,000.

PORTLAND, ORE.—The School Board has announced that bids will be received until noon, Dec. 1, by Whitehouse & Fouilhoux Archs., for the erection of the proposed Lincoln high school. It will be a reinforced concrete steel frame building. Estimated cost, $450,000.

CORONADO, CAL.—A reinforced concrete, fireproof building will be erected at Orange and Park Pl. for the Commerce & Trust Co. at Coronado. McDonald & Applegarth, Call Bldg., San Francisco, Archs., are now preparing detailed plans, and estimates will be received soon.

OROVILLE, CAL.—A 3-story reinforced concrete building will be erected on Montgomery St., on a lot, 40 × 100 ft., by O. H. Seibel.

SACRAMENTO, CAL.—R. A. Herold, Arch., Bryte Bldg., has presented the revised plans and specifications of the proposed Sacramento County court-house to the Supervisors. Mr. Herold's estimate of the cost of the building proposed, is $500,000.

SACRAMENTO, CAL.—The Farmers and Mechanics Savings Bank will erect a bank and office building on the lot, at the northwest corner of the alley, Eighth St., between J and K. It will be a 5-story building. Work on the structure will be commenced next spring. It will be of reinforced concrete. The entire structure will be absolutely fireproof. Cost, $175,000.

The West Sacramento Co., was organized recently, for the purpose of improving the property owned by the Northern Electric Co., at the southern boundary of Broderick, Yolo County. The plans of the company include the erection of storehouses, machine shops, blacksmith shops, paint shops, car barns, repair shops, a pattern shop, a carpenter shop, freight and passenger depots, switching and yard trackage, offices, sub-stations, a river store house, wharfage and other structures. Estimated cost, $2,000,000.

SAN FRANCISCO, CAL.—The Grand Lodge of California, Free and Accepted Masons, plans to construct a temple on the site owned by the Masonic Hall Association at Van Ness Ave. and Oak St., with a frontage of 120 ft. on Van Ness Ave., by 157 ft. on Oak St. and a 178.6 ft. frontage on Hickory Ave. It will be a 5-story concrete and terra cotta front structure. The cost is estimated at $600,000. W. Frank Pierce, of San Francisco, is Grand Master.

SAN FRANCISCO, CAL.—The San Francisco Turn Verein, plans the erection of a hall on the Sutter St. property at an approximate cost of $40,000.

LONG BEACH, CAL.—The Board of Education received bids on Oct. 18 for the construction of three buildings at 16th St. and Atlantic Ave., to be used for a polytechnic high school. The amount available is approximately $145,000. The lowest bid was that of Lynn & Atchison, of Los Angeles, $118,966, for the buildings alone, and complete, including electric wiring, plumbing and finishing touches, $142,328.

TORONTO, ONT.—The Toronto Electric Light Co. has received a permit to erect a 5-story brick storehouse on the Esplanade, costing $140,000.

OTTAWA, ONT.—Bids will be received by P. E. Ryan, Secy., of the Comrs. of the Transcontinental Railway Co., at Ottawa, until noon, Nov. 8, for the construction, etc., of freight sheds and storehouses at Lake Superior Junction, Ont., Redditt, Man., and Springfield, Man. Plans and specifications may be seen, and full information obtained, at the office of Gordon Grant, Ch. Engr., Ottawa, and of S. R. Poulin, Dis. Engr., St. Boniface, Man.

FORT WILLIAMS, ONT.—The contract for the police station and court house to be erected here, has been let to M. H. BRADEN, of this city, at $70,000.

DRESDEN, ONT.—Tenders will be received by R. C. Desrochers, Secy., the Public Wks. Dept., Ottawa, until Nov. 9, for the construction of a post office building at Dresden.

WINNIPEG, MAN.—We are officially advised that the contract for constructing the building at Winnipeg for the Canadian Bank of Commerce has been let to PETER LYALL & SONS. The building is to be of brick and granite, fireproof, and is to cost $800,000. It will have a frontage of 105 ft. on Main St., with a depth of about 120 ft.

NORTH BATTLEFORD, SASK.—The Grey Nuns of Montreal have completed plans for a $50,000 hospital to be erected here. Bids for the construction will be called for, at once, in Montreal.

VANCOUVER, B. C.—McDONALD & WILSON, of this city, have been awarded the general contract for the construction of an 8-story steel and concrete bank and office building, 52 × 120 ft., at Seymour & Hastings Sts., for the Bank of Ottawa. The heating contract was let to WALTER LEEK; plumbing to E. A. BROWN and wiring to the MATHER & ENELL, all of Vancouver. Estimated cost, $260,000.

DICKIE & DIGMORE have received a permit to construct a 6-story apartment house, at Smythe and Seymour Aves., costing $126,000.

DONNELLAN & DONNELLAN have been granted a permit for the construction of a business block at the southwest corner of Homer and Pender Sts., costing $500,000.

HIGH RIVER, ALTA.—Bids will be received by R. S. Desrochers, Secy., Dept. of Public Works, Ottawa, Ont., until 4 p. m., Nov. 2, for the erection of an armory at High River.

WATER SUPPLY—IRRIGATION

(* *Denotes that this work is described in Engineering News.*)

MEDWAY, MASS.—We are officially advised that contract has been awarded to F. A. HONDLITTE & SON, Boston, Mass., for the construction of new waterworks here. Estimated cost, $[illegible]. E. Worthington is Engr., Dedham, Mass. Noted on Oct. 20.

AMESBURG, MASS.—Contract has been awarded by the Water Commissioners to FRANK A. DOE, Amesburg, for the construction of a new cement pumping station at Ring's Corner.

AVON, CONN.—The contract for laying about 6,300 lin. ft. of 4 and [illegible] water pipes has been awarded by the Avon Water Co. to MINER & HODGE, Unionville, Conn., at 18 cts. per ft., the company furnishing all material.

NEW YORK, N. Y.—Bids were received as follows, on Oct. 21, by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, for cleaning water mains, Boro. Brooklyn: Donlon Contracting Co., 95 Broadway, Brooklyn, $59,917; Beaver Contracting Co., $68,914.

NEW YORK, N. Y.—The Department of Water Supply, Gas and Electricity, New York, is preparing plans for laying a system of water mains in the principal streets of Richmond Hill, Woodhaven and other sections of Queens Borough. Estimated cost, about $1,500,000. Henry S. Thompson is Comr.

GENEVA, N. Y.—The citizens on Oct. 18 voted in favor of spending $122,000 for improvements as follows: For a 20-in. water main, $57,000; for new pumps and intake pipe, $35,000; for a reservoir $30,000. The proposition to construct a filtration plant to cost $40,000 was defeated.

*HOHOKUS, N. J.—Bids will be received until Oct. 28 by the Mayor and Borough Council for furnishing material and constructing of a system of water supply, consisting of 15,000 lin. ft. 4 to 10-in. c.-i. water pipe high-pressure, together with fittings, specials, hydrants, valves, etc. Bids may be submitted on the material and labor as a whole or separately. On material bids must be f. o. b. cars Erie R. R., Hohokus. John DeVore is Boro. Clk.

MORRIS PLAINS, N. J.—A new water supply system will be installed at the Morris Plains State Hospital. Estimated cost, $10,000.

*SOUTH RIVER, N. J.—Bids will be received by the Borough Council until 8 p. m., Nov. 28, for water-works system construction. For details see advertisement in this issue. W. W. Young is Consult. Engr., 220 Broadway, New York, 46 Park St., Bordentown, N. J., and Drexel Bldg., Philadelphia, Pa.

PITTSBURG, PA.—Bids for the construction of the foundations for the Mission St. pumping station building and appurtenances, Southside, City of Pittsburg and for placing of gate valves, special castings and appurtenances in the 60-in. rising main near Brilliant pumping stations, will be received at the office of the City Controller, Municipal Hall, until 10 a. m., Nov. 7. Joseph G. Armstrong is Dir. Pub. Wks.

HARRISBURG, PA.—C. Howard Lloyd, Telegraph Bldg., Harrisburg, is preparing plans for a new pumping station to be built at Reservoir Park. Bids will be asked in about a month.

BIG RUN, PA.—An ordinance has been passed authorizing the Gourley Water Co. to construct, maintain and operate a system of waterworks in this borough. Merle M. Hamilton is Boro. Clk.

*SAEGERSTOWN, PA.—Bids will be received by the Burgess and Council until 8 p. m., Nov. 4, for furnishing materials and constructing a system of water works for the borough. There will be required approximately the following: 250 tons c. i. pipe; 10,000 lbs, special castings; 28 fire hydrants, gate valves, valves boxes, etc.; a concrete reservoir; approximately three miles pipe laying, 4, 6 and 8 in. Bids will be received for furnishing any of the materials mentioned above or for constructing the works complete. Witmer & Brown are Engrs., Buffalo, N. Y.

GREENSBURG, PA.—Contract has been awarded to OFFCUT & BENNETT, Greensburg, for constructing the pumping station at South Greensburg, for the Westmoreland Water Co.

FORT HOWARD, MD.—The contract has been let to JAMES A. BOAS, Philadelphia, Pa., at $5,600 for the construction of three reinforced concrete cisterns and piping and connecting same with sewer system, at Fort Howard.

PORTSMOUTH, VA.—The Ordinance Committee of Council has reported favorably on the issuance of $600,000 of bonds for the water-works plant. V. O. Cassel, Jr., is City Engr.

FAIRMONT, W. VA.—The city will advertise at once for bids for the repair and refitting of the city water station which was practically destroyed by fire on Oct. 19. Shrensburg B. Miller is City Engr.

MOUNDSVILLE, W. VA.—The citizens have authorized a bond issue of not less than $100,000 for water-works, sewers and paving.

WHEELING, W. VA.—Contract has been awarded TRIMBLE & LUTZ, Wheeling for the erection of two motor-driven, automatically-controlled pumps which are to furnish the water supply to the hilltop residents of this city. The pumps will have a capacity of 700 gallons pumping from the reservoir per min. Pressure will be furnished by two 60-ft. cypress standpipes. Estimated cost $3,221. C. B. Cooke is City Engr.

ASHVILLE, N. C.—The City Reservoir Commission has awarded contract to GEO. H. DAVIDSON, of Davidson & Colvin, Asheville, to replace the water-tight bottom of the concrete reinforced reservoir with steel, area of 18,000 sq. ft. Estimated cost, $10,000. B. M. Lee is City Engr.

FORT OGLETHORPE, GA. — GEORGE BECKING, of Chattanooga, Tenn., has secured contract at $4,351, for connecting up well No. 4 at Fort Oglethorpe.

LAKELAND, FLA.—See item under Light and Power Plants.

KEY WEST, FLA.—Bids have been opened by the Board of Public Works for repairs to the water-works. Casey, Hedges & Co., Knoxville, Tenn., submitted the lowest bid, at $3,998.

TALLADEGA, ALA.—The city is considering the installation of precipitation and filtration plants. Address Dr. C. S. Northern.

CHATTANOOGA, TENN.—We are officially advised that construction work on the new municipal water system will not be undertaken now. Bonds have not been sold, and the matter has been postponed indefinitely. Walter G. Kirkpatrick, Consult. Engr., Jackson, Miss., prepared plans for the work. Noted on Oct. 20.

JELLICO, TENN.—Walter G. Kirkpatrick, Consult. Engr., Jackson, Miss., is preparing plans for the construction of the proposed water-works.

DAYTON, OHIO.—The citizens will soon be asked to vote upon the issuance of $600,000 of bonds for the installation of the new water-works system. The estimated cost of the system follows: Construction, $225,000; purchase of land for wells, reservoir, right of way, etc., $80,000; improvement of distribution system and extension of mains, $250,000; water towers and accessories, $45,000. C. J. Cellarius is City Engr.

DUNKIRK, OHIO.—Contract for constructing the water-works plant has been awarded by the Council to the NATIONAL CO., South Bend, Ind. J. T. Kinsey is Village Clk.

BRONSON, MICH.—Bonds for $21,000 have been voted by the village, E. M. Turner, Mayor, for a new water-works, standpipe type. Engineers are now preparing plans and will take estimates soon.

McLEANSBORO, ILL.—Bids will be received until 1 p. m., Nov. 3, by the Water Works Commission. T. B. Allen, Chn. for constructing a reservoir and filter and extension of water mains. Estimated cost, $14,542. O. M. Rice, is City Clk. Noted on Oct. 20.

CHICAGO, ILL.—Bids will be received by B. J. Mullaney, Comr. Pub. Wks., until Oct. 28 for furnishing material and constructing, complete, piping for three 350 HP. horizontal water-tube boilers, including the removal of old piping, including temporary piping, and all new piping and steam connections to the induced draft apparatus and stoke engine; also to open feed-water heater and Venturi or Worthington feed-water meter and all other work necessary to complete the piping for the boiler plant in the north boiler room of the 68th St. pumping station.

SPRINGFIELD, ILL.—All bids opened on Oct. 12 for constructing a crib and 24-in. iron intake leading from the river to the well at the pumping station were rejected as excessive. It was recommended that the Water Department do the work. W. J. Spaulding is Supt. W. Wks.

HERRIN, ILL.—The Town Council has purchased a site for a new reservoir. The City Engineer has designed a basin which when completed, will have a capacity of 50,000,000 gallons.

CHICAGO, ILL.—The lowest bid opened on Oct. 7 by B. J. Mullaney, Comr. Pub. Wks., for chain grate stokers for the 68th St. pumping station was submitted by the Illinois Stoker Co., 204 Dearborn St., Chicago, at $3,510.

KINGSTON, ILL.—The citizens have voted $4,000 of bonds for the installation of a water-works system.

CARROLLTON, ILL.—Bids will be received until 2 p. m., Nov. 11, by the Commissioners of the Eldred Drainage and Levee District, Carrollton, for a brick building for pumping plant which they are erecting and frame dwelling for engineer. Leroy McFarlan, Jr., is Secy. The Harman Engineering Co. 120 Fredonio Ave., Peoria, Ill., is in charge of the engineering work.

SUPERIOR, WIS.—The Board of Public Works will receive bids until 1 p. m., Oct. 28, for laying water service pipes in Grand and Cummings Aves.

OCONOMOWOC, WIS.—We are officially advised that bids were received on Oct. 21 by the city for water-main extensions, requiring about 3,500 ft. of 8, 6 and 4-in. pipe, all pipes, specials, etc., furnished by the city. Contract has been awarded to SWEENEY BROS., E. B. Parsons is Engr., Watertown, Wis.

OTTUMWA, IOWA.—The City Council has decided to purchase and operate the water-works plant. Cost, $280,000.

CORYDON, IOWA.—Water and sewer bonds for $45,000 have been sold.

ADAIR, IOWA.—On Oct. 12 the citizens voted in favor of the construction of a water-works system to cost, $20,000.

ALBERT LEA, MINN.—The City Council has passed a resolution ordering the laying of water mains in Frank, St. Joseph and Fifth Sts.

TRIUMPH, MINN.—L. O. A. Stockdill, Village Recdr., will receive bids until 8 p. m., Nov. 1, for the construction of a 4-in. tubular well.

APPLETON, MINN.—Bids will be received until 8 p. m., Nov. 7, by Manford Horn, Recdr., for furnishing a complete pumping plant for a 10-in. well, 185 ft. deep.

SCANDIA, KAN.—We are officially advised that plans and specifications for the water works system here, have been completed and delivered to the Council. Bids will not be asked until the bonds are sold. The J. S. Worley Co., is in charge of the engineering work.

KANSAS CITY, MO.—The Board of Fire and Water Commissioners, E. B. Harrington Secy., has awarded general contract to the UNION BRIDGE & CONSTRUCTION CO., 2518 Olive St., Kansas City, Mo., at $67,000, for the construction of a reconcrete 3-unit water-works intake for the Quindaro station on the Missouri River. Wynkoop Kirstead, Water-works Bldg., Kansas City, Mo., is W.-Wks. Engr.

ONAGA, KAN.—The citizens on Oct. 10, voted to issue $18,000 of bonds for the construction of water-works. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

SUPERIOR, NEB.—The city will spend about $20,000 for water-works improvements. W. Keirstead, Kansas City, Mo. is Engr.

GETTYSBURG, S. DAK.—Bonds for $18,000 have been sold for the construction of the proposed water-works. Tuttle & Pike, Shubert Theatre Bldg., Kansas City, Mo. are Engrs.

BELLE FOURCHE, S. DAK.—Plans and specifications are being prepared by Samuel H. Lee, State Engr., Pierre, S. Dak., for the proposed water-works at Belle Fourche.

HELENA, MONT.—Plans and specifications for a new municipal water plant, submitted by C. W. Halmick, City Engr., have been adopted by the City Council. An election will be held on Jan. 10 to vote on the issuance of bonds for $650,000.

COTULLA, TEX.—The city is considering the construction of a water-works system. C. F. Binkley, is Mayor.

DENISON, TEX.—The citizens have voted to issue $50,000 of bonds for enlarging and improving the water-works system. W. W. Berry is Supt. Noted on Oct. 13.

GALVESTON, TEX.—The City Commissioners have awarded contract to the A. M. BLODGETT CONSTRUCTION CO., Commerce Bldg., Kansas City, Mo., for laying the city main across the channel in Galveston causeway. A. T. Dickey is City Engr. Noted on Oct. 13.

SAN BENITO, TEX.—On Oct. 17 S. A. Robertson, Mgr. San Benito Land Co., closed a deal whereby the land company purchased from C. P. Berreda 5,000 acres of land east of San Benito. The canals of the company will be at once extended at a cost of $100,000 to water this tract.

FORT MORGAN, COLO.—The old Fort Reservoir and Irrigation Co., it is reported has filed with the State Engineer, Denver, maps and estimates for its proposed irrigation system. The dam will be 65 ft. high and located 1½ miles west of here. The Old Fort reservoir will have a capacity of 110,000 acre feet. From the reservoir water will be carried through a canal 98 miles long, costing $1,250,000, to the Haxtum reservoir in the northwest part of Phillips County. The Haxtum reservoir will have a capacity of 20,000 acre feet and will cost $150,000. From this reservoir 19 miles of additional canal will be built to carry the water over the 100,000 acres of land in Phillips and Sedgwick Counties. In addition to the water for irrigating, the dam above Fort Morgan will develop 5,000 HP. during the flood season and a minimum of 1,000 HP. when the water is at its lowest.

TACOMA, WASH.—The city on Oct. 11 awarded the contract to P. J. McHUGH, foot of Wall St., Seattle, for a new water system for the tideflats at $49,190. A. J. Whitney is Engr., W-Wks.

SEATTLE, WASH.—See item under Light and Power Plants.

PASCO, WASH.—The Northwestern Engineering Corporation, 316 Wells Fargo Bldg., Portland, Ore., has prepared plans for a gravity pipe irrigating system for Pasco, water to be supplied by the Pasco Reclamation Co. from their plant on Snake River.

TOLEDO, ORE.—The citizens on Oct. 10 voted in favor of issuing bonds for the construction of a water system. Estimated cost, $20,000.

THE DALLES, ORE.—The Citizens Trust Bank, Seattle, Wash., it is reported will irrigate the Curtis ranch near here. A ditch will be constructed from the Klickitat River. Address Hulin S. or S. F. Mott.

FORT BAKER (Sausalito post-office), CAL.—Bids are asked by Maj. G. McK. Williamson, Constr. Q. M., U. S. A., Fort Mason, Cal., until 11 a. m., Oct. 28, for furnishing and laying an 8-in. water supply main from dock to tanks at Fort Baker.

HIGHLAND, CAL.—The Cleghorn Water Co., Highland, has been incorporated to develop and furnish water for irrigation purposes. The directors are: J. M. and L. D. Cleghorn and J. E. Williams. Capital, $20,000.

FULLERTON, CAL.—The Domestic Water Co. has been purchased by Tarber Montgomery, who will improve the plant by extending the mains.

DEL MAR (Venice post-office), CAL.—T. S. Van Dyke is preparing to install a system of water-works at Del Mar, for a syndicate of Los Angeles men.

LONGBEACH, CAL.—The City Council is considering the construction of a high pressure water system in the business district for protection against fire. Estimated cost, $113,080.

CARSON CITY, NEV.—See item under Light and Power Plants.

OTTAWA, ONT.—Allen Hazen, 103 Park Ave., New York, it is reported, has presented to the City Council his report on the water supply. He recommends McGregor's Lake, in the Gatineau River District, north of the city, as a permanent source of supply, at a cost of $2,400,000, or the installation of a filtration plant at $100,000 less.

DAUPHIN, MAN.—J. J. FLANAGAN, Fort William, Ont., has received the contract for the construction of the waterworks and sewerage system here, at $351,000.

WINNIPEG, MAN.—At the coming civic elections the ratepayers will vote on a by-law to provide $10,000,000 for a permanent water supply which will be piped from the Winnipeg River at a point 110 miles from here. H. N. Ruttan is City Engr.

ROULEAU, SASK.—The city has voted $45,000 for the installation of a water-works system.

PRINCE ALBERT, SASK.—The citizens voted on Oct. 8 to issue bonds for water-works, a filtration plant and sewer system. F. A. Creighton is City Engr.

BIGGAR, SASK.—The city proposes to spend about $15,000 for water-works improvements.

RED DEER, ALTA.—The Canadian Pacific Ry. Co. will build a 1,000,000-gallon reservoir, near Red Deer.

SEWERS.

(* *Denotes that this work is advertised in Engineering News.*)

BRISTOL, R. I.—The contract has been awarded to L. H. CALLAN for the sewer extension in the eastern part of the town.

WATERBURY, CONN.—Bids will be received by R. A. Cairms, City Engr., Board of Public Works, until 8 p. m., Nov. 1, for the construction of a sewer with the necessary appurtenances in Commercial St. Plans and specifications with the City Engr., 9 Leavenworth St.

BINGHAMTON, N. Y.—Plans are completed for the proposed sewage-disposal plant and intercepting sewer system. John A. Giles, City Engr.

BRONXVILLE, N. Y.—All bids received by Frank Dinsmore, Village Clk., for the construction of a sewer in Avon Road have been rejected.

NEW YORK, N. Y.—The following bids were received by Cyrus C. Miller Pres. Boro. of Bronx for constructing sewers and appurtenances in Westchester Ave., between Zerega Ave. and Castle Hill Ave., and in Clover Ave., between Westchester Ave., Lyon Ave. and in Dorris St., between Westchester Ave. and Summit north of Westchester Ave. and in Ludlow Ave., between Pugsley Ave. and Zerega Ave. and in Castle Ave., between Ludlow Ave. and Havemeyer Ave. and in Westchester Ave., between Pugsley Ave. and Olmstead Ave. F. V. Smith Constr. Co., $85,185; Vox Hennesey, $82,917; Anelta Const. Co., $78,443; Alame Const. Co., $81,761; Perille & Shields, $82,011; Briggs & McLoughlin, $83,523; Geo. H. Dunn, $68,372; J. J. Shea Contg. Co., $59,147; J. F. Higgins, $77,937.

BROOKLYN, N. Y.—The construction of a sewer is contemplated by the Maspeth Taxpayers' Association and the Winfield Taxpayers' Association. The cost is estimated at $10,000.

SYRACUSE, N. Y.—Bids will be received at the office of the Board of Contract and Supply until 1:30 p. m., Oct. 31, for the construction of a 12-in. sewer in Euclid Ave., from Roosevelt Ave. to Westcott St. Also for the construction of a pipe sewer in Olive St., from Milton to Willis Ave. Geo. J. Metz is City Clk.

LONG ISLAND CITY, N. Y.—The construction of sewers is contemplated in the following streets: In Lefferts Ave., from Liberty Ave. to Ulster Ave.; cost, $97,700. In Lefferts Ave., from Ulster Ave. to Rockaway Road, and a storm water sewer in Rockaway Road, from Lefferts Ave. to Parson Ave.; cost, $115,900. Sewer in Panama St., from Blake Ave. to Rockaway Road; cost, $90,700. Sewer in Panama St., from Vienna Ave. to Blake Ave.; cost, $83,400. Sewer in Panama St., from Cozine Ave. to Vienna Ave.; cost, $111,800. Open drain in Panama St., from Jamaica Bay to Cozine Ave.; cost, $67,700.

PORT JEFFERSON (L. I.), N. Y.—The construction of a sewerage system with disposal plant is contemplated. The cost is estimated at $500,000.

TRENTON, N. J.—The Park Commissioner has decided to construct a sewer in Cadwalader Park. It will run under the canal and connect with Parkside Ave. sewer.

*SOUTH AMBOY, N. J.—Bids will be received by the Council in South Amboy until 8:30 p. m., Nov. 1, for the construction of part of a sanitary sewer system. J. F. Fulton is Clk. of the Council.

NEWARK, N. J.—Plans have been prepared by Edward S. Rankin, Engr. of Sewers and Drainage for the construction of a large storm water sewer to accommodate the storm water of the Vailsburg Section of Newark. This sewer will probably be constructed of reinforced concrete. The estimated cost is $175,000.

*KEYPORT, N. J.—Bids will be received at the rooms of the Borough Council, Keyport, N. J., at 8 p. m., Nov. 17, for furnishing all material and doing all work necessary to the complete construction of about 10.5 miles of vitrified pipe sewers, from 8 to 15 inches in size with manholes, flushing manholes and other necessary appurtenances, and of a sewage disposal works and pumping station. E. E. Conklin is Mayor.

*SOUTH RIVER, N. J.—Bids will be received by Charles Anderson, Boro. Clk., until 8 p. m., Nov. 28, for the construction of the following sections of sewerage system. Section 1. The Collecting System, comprising about seven miles of terra cotta pipe sewer fifteen inches and less in diameter and all appurtenances. Section II. The Disposal Works, including C. I. Pipe, River Crossing, Pump House, Disposal Works, and Piping to and through these. Plans and specifications may be seen at Borough Hall, South River, N. J., Joseph Mark, is Mayor.

SCRANTON, PA.—Bids will be received by John A. Loughney, Secy. of the Jermyn Borough Council, until Nov. 7, for the laying of a 10-in. sewer from the corner of Jefferson Ave. along Franklin St. to the Lackawanna River.

MONACA, PA.—The contract has been awarded by the Monaca Borough Council to J. L. CONNOR, Freedom, for the construction of 600 ft. of 24-in. sewer in Tenth St., from Indiana Ave. to the Ohio River bank.

PHILADELPHIA, PA.—Bids have been received by William R. Knight, Asst. Director of Public Works, Philadelphia, Pa., for the construction of 18 branch sewers in different parts of the city. The estimated cost is $30,000. Most of the work will be done in West Philadelphia.

*BALTIMORE, MD.—Bids will be received at the office of J. Sewell Thomas, City Register, City Hall, Baltimore, Md., until 11 a. m., Nov. 2, for constructing sanitary lateral sewers in District 34, as shown on plans on file in the office of Calvin W. Hendrick, Ch. Engr. of the Sewerage Commission.

FRONT ROYAL, VA.—A. F. Brown, State Engr., has been engaged as consulting engineer for the proposed construction of a sewer system.

MOUNDSVILLE, W. VA.—See item under Water Supply—Irrigation.

HUNTINGTON, W. VA.—See item under Streets and Roads.

FORT CASWELL (Southport post-office), N. C.—Bids will be received by Lieut. R. O. Edwards, Constr. Q. M., U. S. A. until Nov 18, for the construction of sewers and cisterns at this post.

SMITHFIELD, N. C.—Bids will be received until Nov. 1 for the construction of a sewer system. J. H. Wellons is Mayor.

MACON, GA.—Plans have been prepared by J. W. Wilcox, City Engr., for the construction of sewers in North Highland.

BARTOW, FLA.—The contract has been let to J. M. MINNIS for the construction of a storm sewer to drain the hollow at the intersection of Main St. and Hendry Ave.

CULLMAN, ALA.—The city is contemplating the construction of a sewer system. M. L. Robertson is Mayor.

CHATTANOOGA, TENN.—The contract has been awarded by the Board of Public Works to I. H. MISHLER, 310 McCallie Ave., Chattanooga, for the construction of a sewer in McCallie Ave., between Hawthorne St. and Highland Park Ave.

MEMPHIS, TENN.—The City Council received plans prepared by E. L. Dalton, Dallas, Tex., for the new sanitary sewer system. The system will require 7,880 ft. of 12-in. pipe, 15,570 ft. of 8-in. pipe and 32,820 ft. of 6-in. pipe, 15 manholes and 106 lampholes. The cost is estimated at $21,000.

ASHTABULA, OHIO.—The City Council has instructed the Service Department to prepare plans for the construction of a sewer in Middle St.

CINCINNATI, OHIO.—Bids will be received by John J. Wenner, Clk. Bd. Public Service, until Nov. 1, for the construction of lateral sewers and drains in Wise Alley and Kuhlman Ave.

CINCINNATI, OHIO.—The contract has been awarded by the Board of Control to the KIRCHNER CONSTRUCTION CO. for the construction of the new Marshall Ave. sewer at $54,791.

CLEVELAND, OHIO.—The contract has been awarded to TUBSUAN & BURKHARD, 2153 Fairmount Road, Cleveland, Ohio, for the construction of sewers in North Woodland Road.

CLEVELAND, OHIO.—The construction of a sewer through 1½ miles of West 25th St. is contemplated. The cost is estimated at $90,000. Robert Hoffman is City Engr.

DAYTON, OHIO.—The contract has been awarded to SHAFOR & DILL for the construction of sanitary sewers in Districts 4 and 5, at $7,570, and in District 6, at $2,121.

LIMA, OHIO.—See item under Buildings.

WILMINGTON, OHIO.—The Council is considering the construction of a drainage and sewerage system. The estimated cost is $90,000. E. G. Bradbury is Const. Engr., Columbus, Ohio.

YOUNGSTOWN, OHIO.—The contract has been awarded to W. E. GARTLAND for the construction of sewers, as follows: In Loga Ave., at $15,525, and in Rayen Ave., at $3,943.

NEW PHILADELPHIA, OHIO.—Plans are being prepared, George Arnold, City Engr., for the construction of a sewer system.

INDIANAPOLIS, IND.—The Board of Public Works has awarded contracts for the construction of sewers as follows: A local sewer in New York St., from Audomen Rd. to Bolton Ave. to the MADISON COUNTY CONSTRUCTION CO. A local sewer in McPherson St., from 13th St. to Southerland Ave., a local sewer in Blackford St., from Indiana Ave. to 540 feet south; a local sewer in Lasalle St., from Glen Drive to Roosevelt Ave.; a local sewer in alley east of Milay Ave.; a local sewer in Stewart St., from 23d St. to Glen Drive; a local sewer in New Jersey St. from 38th to 44th Sts.; a local sewer in alley east of Lincoln St. to the MARION COUNTY CONSTRUCTION CO., and a local sewer in Euclid Ave., to the SHEEHAN CONSTRUCTION CO., Indianapolis, Ind.

KOKOMO, IND.—R. L. Sackett, Pardue University, Lafayette, Ind., has been retained as engineer for the construction of a sanitary sewer system.

MUNCIE, IND.—J. Earl Houts, Town Clk., Wyser Bldg., Muncie, Ind., is advertising for bids for the construction of sewers in Riverside City.

PEORIA, ILL.—Plans have been prepared for the construction of a sewer from Warner Ave. and Oak St. the full length of Sanford St. to Globe with connecting lateral running east and west. Fred B. Tracy is City Clk.

CORYDON, IOWA.—See item under Water Supply—Irrigation.

CORYDON, IOWA.—Plans and specifications have been received by D. L. Murrow Mayor, from the Iowa Engineering Co., for the construction of a complete sewer system.

IOWA CITY, IOWA.—Bids are asked for the laying of 800 ft. of 12-in. tile sewer with the necessary manholes. W. A. Hall is Clk.

DULUTH, MINN.—Bids will be received at the office of the Director of Public Service, City Hall, until noon, Nov. 1, for the construction of main and lateral sewers in Wise Alley, from Cutter St. to Linn St. Plans and specifications may be obtained at the office of the Chief Engr. of the Dept. of Public Service. John J. Wenner, Clk.

LONG PRAIRIE, MINN.—The contract has been awarded to BOSWORTH BROS., Ada, for the construction of part of a sewer system.

ST. LOUIS, MO.—Plans have been prepared for the construction of a sewer pumping station in Forest Park to dispose of the odor in the River Des Peres. The cost of the plant, including pipe line, will be about $25,000. Maxime Reber is City Engr.

TOPEKA, KAN.—W. G. Tandy, City Comr. of Streets and Public Improvements, is planning the construction of a sewer to handle the sawage of the western part of the city. The cost is estimated at $30,000.

FARGO, N. DAK.—The contracts have been awarded to L. W. SCHRUTH for the construction of three sewers. F. J. Anders is City Engr.

PLANO, TEX.—Plans are being prepared by Forrest H. Lancashire, Dallas, for the construction of a sewer system, to cost from $15,000 to $18,000.

SAN ANGELO, TEX.—F. H. Lancashire, Dallas, Tex., has been retained by the San Angelo Sewer Co., C. C. Kirkpatrick, Pres., to report on plans for extending and improving the sewerage purification plant.

CHECOTAH, OKLA.—The city contemplates the installation of a sanitary sewer system. The estimated cost is $40,000.

DEMING, N. MEX.—The construction of a sewer system is under consideration by the City Council.

KENNEWICK, WASH.—Plans have been prepared by Hanford & Blackwell, Alaska Bldg., for the construction of a $60,000 sewer system.

PROSSER, WASH.—Bids will be received by E. A. Coffman, City Clerk, until 5 p. m., Nov. 1, for the construction of a sewer system. Plans and specifications at the Clerk's office, or at the office of the Pacific Builder and Engineer, Seattle, Wash.

CORNING, CAL.—The construction of a sewage and water system is contemplated.

HEALDSBURG, CAL.—The construction of a sewer system is under consideration by the City Trustees.

EAST SAN JOSE, CAL.—Plans and specifications have been submitted by Town Engineer Fisher of East San Jose, Cal., for the construction of a sewer in Chace Ave., from Lendrum Ave. to McKee Road. The plans were adopted and Charles O. Russell, Clk., was instructed to advertise for bids.

SANTA MONICA, CAL.—The City Council passed an ordinance for the construction of a sewer in Fremont and Fifth Sts. G. A. Murry is City Clk.

SACRAMENTO, CAL.—The contract for laying the extension of the sewer system in Carpenter St. was awarded to JAMES STEAD.

SONOMA, CAL.—The town is about to commence the installation of a sewer system. Bonds have been voted and preliminary plans have been adopted. The cost is $20,000.

STOCKTON, CAL.—The City Council will purchase 200 acres of land to be used for the disposal of city sewage.

POCATELLO, IDAHO.—Bonds to the amount of $164,788 for the construction of a modern storm and sanitary sewerage system has been authorized.

BARRIE, ONT.—The contract has been awarded to J. LUCK, Barrie, Ont., for the construction of the Main St. sewers.

GARBAGE DISPOSAL.

(Denotes that this work is advertised in Engineering News.)*

ROCHESTER, N. Y.—Contract will soon be let for the construction of the proposed refuse incinerator. Edwin A. Fisher, City Engr., is preparing plans and specifications. Noted on Oct. 20.

ATLANTA, GA.—The Board of Health on Oct. 14 adopted the report from a special committee, recommending that a site be selected, not less than 30 acres, outside of the limits of the city, on which to erect a reduction and an incinerating plant, with equipment, to cost not more than $250,000, this sum to include the $50,000 crematory bond issue already appropriated. Dr. W. L. Gilbert is Chn. Com.

SUPERIOR, WIS.—The Board of Health is considering the construction of a garbage incinerator. Estimated cost, $15,000.

SAN JOSE, CAL.—Bids for the garbage incinerator were submitted to the city on Oct. 10 as follows: P. F. Dunlin, $39,843; Lilley & Thurstan Co., $19,000; Powers Specialty Co., $40,000; Dixon Engineering & Construction Co., $25,000.

STREETS AND ROADS.

(Denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids will be received by the Park Commissioners, R. S. Peabody, Chn., until Oct. 31, for the grading of Franklin Field Speedway.

The CENTRAL CONSTRUCTION CO., 6 Beacon St., Boston, has been awarded the contract for vitrified brick pavement at the Navy Yard, Boston, bids for which were received on Oct. 1, at $7,381, by William M. Smith, Acting Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C.

BLOOMFIELD, CONN.—Bids will be received by the Board of Selectmen, G. F. Hubbard, Chn., until 2 p. m., Oct. 28, for the reconstruction of about 5,000 lin. ft. of macadam road. Plans and specifications are with the Board.

HARTFORD, CONN.—The contract for the construction of about 5,847 lin. ft. of macadam-telford road, bids for which were received on Sept. 30, has been awarded by the State Highway Commissioners to the LANE CONSTRUCTION CORPORATION, of Meriden, Conn., for $1.71 per lin. ft. for macadam, $2.15 for telford, and $1 per lin. ft. for rubble drain.

WATERFORD, CONN.—Bids for the construction of about 1,800 lin. ft. of telford and 700 lin. ft. of macadam road have been received by the Board of Selectmen, A. H. Lamphere, Chn., as follows: Albert J. Perkins, New London, Conn., $2.25 per lin. ft. for telford, and $1.65 per lin. ft. for macadam; Frank Redden, New London, $2.35 and $1.58; A. D. Bridge's Sons Co., Inc., Hazardville, Conn., $2.44 and $1.84.

WETHERSFIELD, CONN.—Bids will be received by the Board of Selectmen, A. W. Hanmer, Chn., until Oct. 28, for the construction of about 4,000 lin. ft. of macadam road. Plans and specifications are with the Board.

SYRACUSE, N. Y.—Bids will be received by the Board of Contract and Supply, until 1.30 p. m., Oct. 31, for paving Catherine St., from James to Butternut Sts. Plans and specifications are on file in the office of the City Engr. John J. Halloran is Clk. Bd.

BUFFALO, N. Y.—The lowest bid received by Francis G. Ward, Comr. of Pub. Wks., on Oct. 11, for laying a brick driveway, etc., in connection with School No. 11, on West Delavan Ave., near Brantford, Pa., was that submitted by George W. Moore. The bids have been referred to the Common Council.

NEW YORK, N. Y.—Bids will be received by George McAneny, Pres. Boro. of Manhattan, until 2 p. m., Nov. 7, for regulating, grading, curbing, flagging and laying a 48-in. double pipe culvert in Muscoota St. (225th St.), from Broadway to the line dividing the Boros. of Manhattan and the Bronx.

For regulating and paving with asphalt block pavement on concrete foundation the roadway of Emerson St., from Broadway to Seaman Ave.

For widening the roadway and repaving with sheet asphalt pavement on concrete foundation the widened roadway of south side of 42d St., from the west side of Fifth Ave. to the east side of Sixth Ave.

For regulating and paving with wood block pavement on concrete foundation the roadway of New St. (Delancey St.), from Bowery to Lafayette st.

For regulating and paving with sheet asphalt pavement on concrete foundation the roadway of 81st St., from East End Ave. to Exterior St.

NEW YORK, N. Y.—The following bids were received by Alfred E. Steers, Pres. Boro. of Brooklyn, on Oct. 19, for regulating and paving with asphalt on a concrete foundation the roadway of New York Ave., from Ave. H to the southerly line of Flatbush Water-Works: Barber Asphalt Paving Co., 30 Church St., $11,619; Uvalde Asphalt Paving Co., 1 Broadway, $11,301; Cranford Co., 52 Ninth St., Brooklyn, $11,827; Boro Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $11,150.

NEW YORK, N. Y.—The following bids were received by Lawrence Gresser, Pres. Boro. of Queens, on Oct. 20, for (a) regulating and repaving with granite blocks on a concrete foundation a roadway in Fulton Ave., from Astoria Ferry to the Boulevard; also, for regulating, grading, recurbing and rebuilding catch basins and paving with asphalt blocks on a concrete foundation; (b) Hopkins Ave., from Broadway to Grand Ave.; (c) Crescent Ave., from Jamaica Ave. to Newton Ave.: For regulating, grading, curbing and paving with asphalt blocks on a concrete foundation; (d) Fifth Ave., from Jackson Ave. to Pierce Ave.; (e) Eighth Ave., from Flushing Ave. to Graham Ave.: For repaving with granite block pavement on a sand foundation; (f) College Point Causeway, from a point 200 ft., north of Myrtle Ave. to a point 3,400 ft. north of Myrtle Ave.; (g) Jackson Ave., from Trans Meadow Road to Woodside Ave.: For regulating, grading, curbing and repaving with vitrified blocks on a sand foundation; (h) Woodhaven Ave., from Jamaica Ave. to a point 710 ft. north of Jamaica Town Line: (a) J. J. Shea, $15,325; (a) Astoria Construction Co., $14,855; (a) Greene Contracting Co., $19,330; (a) H. P. George, $14,775; (a) M. Baird Contracting Co., $15,371; (a) Clancey & Van Alst, $15,502; (a) Hicks-Johnson Construction Co., 150 Jackson Ave., Long Island City, $15,128; (a) Atlanta Contracting Co., $14,550; (a) H. A. Mullen, $14,436; (a) Peace Bros., $16,810; Hastings Pavement Co., 25 Broad St., New York., (b) $21,564, (c) $20,689, (d) $13,760, (e) $16,149; Barber Asphalt Paving Co., 30 Church St., (a) $22,113, (c) $21,416, (d) $14,042, (e) $17,199; H. J. Mullen, (f) $19,360, (g) $19,715, (h) $35,430; H. P. George, (f) $20,640, (g) $20,303, (h) $40,184.

NEW YORK, N. Y.—The following bids were received on Oct. 15, by Cyrus C. Miller, Pres., Boro. of Bronx, for paving with asphalt blocks on a concrete foundation the roadway of Wilkins Ave., from Intervale Ave. to Southern Boulevard: Barber Asphalt Paving Co., 30 Church St., $9,796; Hastings Pavement Co., $9,362.

For paving with asphalt blocks on a concrete foundation the roadway of East 133d St., from the east side Southern Boulevard to Locust St.: Barber Asphalt Paving Co., $21,161; Hastings Pavement Co., $19,178.

For paving with asphalt blocks on a concrete foundation the roadway of East 172d St., from Third Ave. to Park Ave.: Barber Asphalt Paving Co., $7,523; Hastings Pavement Co., $7,301.

For paving with bituminous macadam the roadway of Walton Ave., from Fordham Road to Burnside Ave.: Barber Asphalt Paving Co., $16,769; Uvalde Asphalt Co., $13,837; Asphalt Construction Co., $16,119.

For paving with granite block pavement and sand foundation the roadway of West 165th St., from Anderson Ave. to Lind Ave.: L. J. Moran, $8,218; Mathew Beard Contracting Co., $8,412; Asphalt Construction Co., $8,391; Atlanta Contracting Co., $7,529; John Farrell, $8,327.

*ASBURY PARK, N. J.—Bids will be received by William C. Burroughs, City Clk., until 8 p. m., Oct. 31, for laying about 8,450 sq. yds. of creosoted wood paving blocks on Cookman Ave., from Grand Ave. to Kingsley St.

ALLENTON, PA.—Bids are asked until 1:30 p. m., Nov. 4, by the Board of County Commissioners of Lehigh and Northampton Counties, for constructing sidewalk approaches for the bridge over the Lehigh River, between Slatington and Walnutport. J. S. Troxell is Clk. of Lehigh County, Courthouse, Allentonwn.

HARRISBURG, PA.—The State Highway Department, W. W. Caldwell, Comr., has awarded the following contracts: For the construction of a road in Washington Township, Berks County, to WILLIAM McCLELLAN, of Strafford; for a road in Dela Boro., York County, to THOS. MEEHAN & SONS, of Mt. Airy.

PHILADELPHIA, PA.—Four bids were received on Oct. 18, by William R. Knight, Asst. Dir. of Pub. Wks., for paving Arch St., from Delaware Ave., to Front St. Edwin H. Vare, at $3.39 per sq. yd. for granite block and $3.49 for the wooden block, laid upon a concrete foundation. Where the foundation has already been laid Mr. Vare's bid was $3 for each style of paving. The Barber Asphalt Co. submitted two bids: For furnishing and laying granite blocks, $3.07 for ordinary blocks by the sq. yd. and $3.47 for selected blocks. For wooden blocks, with concrete foundation, $2.99 per sq. yd. The bid for granite blocks where foundation is already laid was $2.23 and for wooden blocks, $2.29.

George W. Ruch bid as follows: Granite blocks, $3.34 per sq. yd. and $3.19 for wooden blocks, with $2.84 for granite blocks where foundations exist and $2.74 for wooden blocks. The bid of the American Cresote Co., was not read, it is stated.

BEN AVON (Allegheny post-office), PA.—The Ben Avon Boro. council has awarded the contracts for the sub-grading, curbing and bitumen macadamizing of Monitor Ave., from the Brighton road to the right-of-way of the Pittsburg, Ft. Wayne and Chicago R. R. Co. and for walks, steps and stone fences in the park at Ben Avon station. The latter improvement will require about 270 cu. yds. of grading above the walks and steps, 2,110 sq. ft. of concrete walk, 520 lin. ft. of concrete steps, 570 ft. of stone fence and other material. This contract has been let to J. K. WYMARD. The Monitor Ave. work will require about 958 cu. yds. of grading, 1,743 ft. of curb, 2,022 sq. yds. of bitumen macadam and 396 sq. yds. of black brick gutter. THOMAS SWEENEY was the successful bidder for this work.

SCRANTON, PA.—Bids were received on Oct. 15 by C. V. Terwilliger, Dir. of Pub. Wks., for paving the following streets: Larch St., from Washington to Wyoming Ave., McDonald Construction Co., $1.80 per sq. yd., asphalt; Warner-Quinlan Co., $1.95.

Linden St., from Prescott to Arthur Ave., McDonald Construction Co., $1.82; Warner-Quinlan Co., $1.89.

Costello Court, from Linden St. to Mulberry St., McDonald Construction Co., $1.80; Warner-Quinlan Co., $1.95.

Dupont Court and Forest Court, from Mulberry to Vine, McDonald Construction Co., $1.80; Warner-Quinlan Co., $1.95.

WASHINGTON, PA.—Bids will be received by John H. Moffit, County Comptroller, until noon, Nov. 14, for the construction of the Meadowlands-Houston Road and the Stockdale-Roscoe Road. Chaney & Armstrong are County Engrs.

HUNTINGTON, W. VA.—Bids will be received until 1 p. m., Nov. 14, by the Board of Commissioners of Huntington for paving, with vitrified brick, four alleys, each for the distance of three city blocks. Bids are also asked on a 12-in. lateral sewer in the alley between Jefferson and Madison Aves. and Eleventh and 13th Sts.

FORT DADE (Egmont post-office), FLA.—The EDWARDS CONSTRUCTION CO., of Tampa, Fla., has been awarded the contract at $7,913, for furnishing 33,200 sq. ft. of concrete road and 2,650 sq. ft. of concrete walk at Fort Dade.

MEMPHIS, TENN.—The contract for paving Peabody Ave., has been awarded to the MEMPHIS ASPHALT & PAVING CO., at $35,260, and H. P. STREICHER & CO., received the contract for the extension of Madison Ave., from Cooper St. to the parkway, at $19,130. Asphalt will be used on both streets.

CALDWELL, OHIO.—Bids will be received at the office of the County Commissioners of Noble county, until noon, Nov. 9, for grading and paving, with brick, a road 1.09 miles in length in Noble Township, which is estimated to cost, $16,487. The work is to be done under the supervision of the Ohio Highway Commission. J. C. Wonders, is Comr.

CHARDON, OHIO.—Bids will be received at the office of the County Commissioner of Geauga County, until noon, Nov. 9, for grading and paving, with brick, a road one mile in length in Hambden Township, after the plans and specifications by the Ohio Highway Department. The estimated cost of the work is $11,897. J. C. Wonders is State Highway Comr.

EATON, OHIO.—Bids will be received at the office of the County Commissioners of Preeble County, until noon, Nov. 1, for grading and macadamizing a road two miles in length in Washington Township, under the provisions of the state highway act. The estimated cost of the work is $11,068.

CINCINNATI, OHIO.—Bids will be received until noon, Nov. 18, by the Board of Hamilton County Commissioners, for the improvement of North Bend Road, from Harrison Pike to the north Corporation Line of Mount Healthy, Green Township. Fred Dreihs, is Clk. and Stanley Struble is Pres. of Bd.

LOGAN, OHIO.—The City Council has adopted a resolution declaring it necessary to improve Main St. from Culver St. to the Hocking Valley Ry. Co. tracks. Henry T. Leach is City Clk.

MADISONVILLE, OHIO.—Bids will be received by the Village Council, until noon, Nov. 2, for the construction of a cement sidewalk on the south side of Bramble Ave., from Columbia Ave., to a point 5 ft. west of South Central Ave. J. A. Conant is Clk.

TOLEDO, OHIO.—The contract for improving River Road from Maumee to Turkey-foot Rock, has been awarded to the GRAPE ISLE STONE CO. The engineer's estimate is $13,471.

Bids will be received at the office of the County Commissioners, until noon, Nov. 2, for the grading and macadamizing of a road, 2.59 miles in length, in Washington Township, Lucas County, after the plans and specifications on file at the office of J. C. Wonders state highway Comr. The estimated cost of the work is $23,488.

YOUNGSTOWN, OHIO.—The following bids have been received by G. M. Slomery, City Engr.: McKinnie St. paving, H. DeGroot, $10,514; Rayen Ave paving, Westrumite material, Kennedy Bros., $6,211; Asphalt, Cleveland-Trinidad Co., $7,272; Hine St. paving, M. P. Connelly, $1,201 and Woodbine and Bryson St. paving, S. H. DeGroot, $10,285.

DECATUR, IND.—The contract for paving various streets in Decatur, has been awarded to J. J. KELLIHER & SON, of Frankfort. Culver brick will be used.

FOWLER, IND.—The Commissioners of Benton County will receive bids until 1 p. m., Nov. 7, for the construction of the following roads in York Township: Walsh rock road, 11,250 ft. in length. The Kline rock road, 14,530 ft. long, including two bridges and four culverts; the McEwen rock road, 9,725 ft. long and the Yates rock road, 9,760 ft. long, including 5 bridges and 6 culverts, estimated to cost $8,150. The above roads are to be paved with crushed blue limestone 9-ft. wide and 10-in. deep. Lemuel Shipman is County Audr.

HAMMOND, IND.—The Board of Public Works has awarded the contract for constructing sidewalks on Melville Ave., Ames Ave. and Walter St., to NEWELL BROS.

LOGANSPORT, IND.—The Commissioners of Cass County will receive bids until 10 a. m., Nov. 15, for the construction of what is known as the James F. Harvey road, on the line between Cass and White County. George W. Cann is County Audr.

NEW ALBANY, IND.—The Board of Public Works is asking for bids for the paving of 14th St., with brick. Charles Appleby is City Clk. and Supt. Paving.

VINCENNES, IND.—The Board of Public Works has let a contract for paving, with concrete, the sidewalks of 14th St., to EDWARD PENNINGTON, at 8 cts. a sq. ft. and 36 cts. a lin. ft. for curbing.

WABASH, IND.—The Commissioners of Wabash County, have let a contract for the construction of two gravel roads, one to ALONZO HOOVER, of North Manchester, Ind., at $4,445; and another to C. M. WALES, of Converse, Ind., at $7,825.

DETROIT, MICH.—The Common Council of Detroit, has directed the Board of Public Works to advertise for bids for paving the following streets: Lycaste Ave., from Detroit terminal R. R. to Jefferson Ave., Illinois St., from Brush Boulevard to Hastings St., and from Dequindre St. to Chene St.; Holbrook Ave., from Brush St. to Oakland Ave.; Waterloo from Helen Ave. to East Grand Boulevard. Also for grading and paving several Alleys, also grading and paving Lafferty Pl., from Howard St. to Michigan Central R. R. J. J. Haarer, is Comr., City Hall, Detroit.

CHICAGO, ILL.—Bids are asked by B. J. Mullaney, Comr., of Public Works, until 11 a. m., Nov. 2, for paving with No. 2 granite blocks, the north and south roadway of Ogden Ave.

EAST ST. LOUIS, ILL.—The Board of Local Improvements awarded the following contracts on Oct. 20: THE MEYER CONSTRUCTION CO., of St. Louis, for improving the alley between Twelfth and 13th Sts. and College Ave., and State St. for $4,688. This firm also will improve the rock road from Ninth to Tenth Sts., for $2,917.

C. A. HORN, of East St. Louis, for improving Brady Ave. from Main to Tenth Sts., at $21,923.

Also for improving 19th St. from Bond to Brady Aves., at $8,335.

GAYNORD & SWEENEY, of East St. Louis, for improving Kansas Ave., from Eleventh to 13th Sts., at $7,833.

PEORIA, ILL.—Work on the paving of South Adams St. from Bridge to Hamilton Sts. with creosote blocks is to be started immediately. The Board of Local Improvement having awarded the contract at a meeting held recently to BREWSTER & EVANS, of Peoria, at price of $34,491. This was the lowest bid of the six received. George F. Simmons, is Pres. of Bd.

STREATOR, ILL.—A contract for paving West Bridge St. has been awarded to JOHN BAER at $1.25 per sq. yd., and for paving South Vermillion St. to GEORGE SWARTZ, at $1.39 per sq. yd.

MILWAUKEE, WIS.—JACOB POSANSKI, Montana St. and Third Ave., has been awarded the contract by the County Board for grading and widening Grand Ave. from the viaduct to Hawley road.

DES MOINES, IOWA.—The Department of Streets and Public Improvements has entered into a contract with the BRYANT-FORD-McLAUGHLIN ASPHALT PAVING CO., for the paving and curbing of 37th St., from the south line of Grand Ave. to a point 500 ft. south of St. John road. The paving is to be put in this fall.

CROOKSTON, MINN.—The following bids were received by A. M. Childs, City Engr., on Oct. 11, for paving Houston Ave., South Ash St., East Fletcher St., East Robert St., East Second St., East Third St.; price per sq. yd., unless otherwise stated: P. McDonnell, of Duluth, asphalt $2.10, donellite, $2; Creosote Block (for 3-in. block, 16-lb. treatment) $2.19; General Contracting Co., of Minneapolis, asphalt, $2.13; Creosote block (3-in. block, 16-lb. treatment), $2.35; Sub-grading, 30 cts a cu. yd. Rudolph S. Blome Co., of Chicago, Ill., Granitoid, $2.45;

Kettle River Co., of Minneapolis, Creosote Block, $2.23; Sub-grading, 35 cts. per cu. yd.

LINCOLN, NEB.—Bids are asked by Roscoe C. Ozmun, City Clk., until noon, Oct. 28, for various kinds of paving in District No. 187.

GUTHRIE, OKLA.—The contract for paving Vine St., with vitrified brick, has been awarded to J. F. HILL, at $2.15 per sq. yd.

FORT WARD, WASH.—Bids for the construction of roads, walks, drains, crossings, etc., at Fort Ward, will be received by Capt. E. C. Long, Constr. Q. M., 482 Arcade Annex, Seattle, until 11 a. m., Nov. 5.

WALLA WALLA, WASH.—Bids will be received until 2 p. m., Nov. 2, by the State Highway Board, Henry L. Bowlby, Secy., Olympia, for grading, draining and macadamizing State Aid Road No. 54, known as the John Seeber Road in Walla Walla County.

EL CENTRO, CAL.—Bids will be received until Nov. 14, by D. S. Elder, County Clk. for grading approaches to two bridges.

LOS ANGELES, CAL.—The Board of Public Works has awarded the contract to EARL F. LOW, 240 South Hill St., at $7,727, for improving Figueroa St.

The following bids have been received by the County Board of Supervisors, for the improvement of a portion of Monterey Pass road, 11,732 ft. in length. A. C. St. John, 1017 Ingraham St., grading and culverts $8,100; Oiled macadam paving in place, $2 per ton, for 8,332 tons; Class A concrete, $15 per cu. yd; Class C, $13; steel, 5 cts. a lb.

The following bids have been received for improving a section of Mountain Ave., 8,093 ft.: M. S. Cummings, grading and culverts, $8,807; oiled macadam paving in place, $1.77 per ton, via Pacific Electric R. R., or $2.11 per ton, via Santa Fe R. R., total amount, 4,919 tons.

Robert P. Law, Eagle Road, for grading and culverts, $6,750; paving, $1.40 and $1.65.

LOS ANGELES, CAL.—The following bids have been received for improving road district No. 1, near Bairdstown: F. H. Potts, $23,951; M. S. Cummings, grading and graveling, $2.14 per sq. yd; cement curb, 35 cts. per lin. ft., cement gutter, 20 cts. per sq. ft., cement sidewalk, 12½ cts. per sq. ft.

RIVERSIDE, CAL.—The STAR CEMENT CO., was awarded the contract for improving Lime St., at $7,723.

SANTA BARBARA, CAL.—Bids will be received by C. A. Hunt, Clk., Bd. of Supervs., until 10 a. m., Nov 7, for grading Sections Nos. 1 and 2 of Coast Road.

UKIAH, CAL.—The following bids were received for improving the Little Lake and Potter Valley road: Fairbanks & Baechtel, $8,165; Robert Williams, $8,500; H. H. BEARD, $6,480 (awarded contract). The same contractors submitted bids for improving the Little Lake and Long Valley road; as follows: $9,750, $9,000; $8,250, respectively, and C. A. LAWSON, at $7,448 (awarded contract).

PHOENIX, ARIZ.—We are officially advised that the contract for constructing a territorial highway between Lowell and Douglas, bids for which were received on Oct. 18, has been awarded to R. TOOBEY & SONS, of Phoenix, at $55,000.

FREDERICTON, N. B.—See item under Miscellaneous Contracts, Trap Rock.

MANUFACTURING PLANTS.

(Denotes that this work is advertised in Engineering News.)*

LEWISTON, ME.—The Lewiston Bleachery & Dye Works plans the erection of a fast black dye works, south of the present plant. It will be of brick construction, 60 × 200 ft. and twenty-two stories high. Construction will be started soon.

BOSTON, MASS.—Preparations are being made by the Boston & Maine R. R. Co. for the construction of locomotive and repair shops, which will involve an expenditure of about $2,500,000, work on which will commence, immediately. A. B. Hubbard is Superv. of Bldgs., Boston.

NEW YORK, N. Y.—Shire & Kaufman, Arch., 110 East 23rd St., have completed plans for the 11-story brick factory, 98.9 × 100 ft., to be erected by Martin and Arthur S. Zinn, of 670 Hudson St., at the southeast corner of Eleventh Ave. and 25th St. Cost, $300,000.

BUFFALO, N. Y.—The F. N. Burt Co., manufacturers of paper boxes, has had plans completed for a 5-story and basement brick and concrete addition to its plant at Myrtle and Hamburg Sts. Estimated cost, $25,000.

George J. Meyer, Foot of Brace St., contemplates the erection of a malthouse on property he has bought on Auburn Ave.

BUFFALO, N. Y.—The contract to erect a blacksmith shop and boiler house for the Niagara Machine & Tool Works, at its new plant on Northland Ave. we are officially advised has been let to METZ BROS., 1295 Fillmore Ave., Buffalo. It will be of steel and brick and 45 × 162 ft. George A. Lantz is Pres. Green & Wicks, 110 Franklin St., are the Archs.

The Riverside Malting Co. will make improvements to its malting house on Niagara St., to cost $25,000, it is reported.

ROCHESTER, N. Y.—The Commercial Register Co., of Buffalo, has been consolidated with the Benjamin Account System Co., recently incorporated at Rochester, with a capital stock of $120,000, and a new manufacturing plant for the combined business will be built at Rochester. The proposed plant will be equipped with woodworking machinery and motors for its electrical operation, Niagara Falls power being used.

UTICA, N. Y.—The Kendall Knitting Co. has secured a permit for the construction of its proposed mill at South and St. Vincent Sts. It will be of brick construction and the estimated cost is $30,000.

WEST NEWBURGH (Newburgh post-office), N. Y.—JAMES F. TEMPLETON & SON have the contract to build the proposed car barn for the Orange County Traction Co., at West Newburgh. The structure is to be 250 ft. long, 60 ft. wide at one point, and 100 ft. at another. It will contain four tracks and will adjoin the Company'sc present car barn in Wisner's Lane.

NEWARK, N. J.—THE LEWIS PARKER BUILDING & CONSTRUCTION CO., Lafayette St., Newark, has received the mason work contract on the 4-story brick factory for the Shiman-Miller Mfg. Co., to be rebuilt at Austin and Murray Sts., from plans by William E. Lehman, 738 Broad St.

PRINCETON, N. J.—Ernest Flagg, 35 Wall St., New York, is preparing plans for a printing plant for the Princeton University.

KANE, PA.—The Kane Blind & Screen Co. plan the reconstruction of a plant south of the Wetmore Road.

MAYFIELD, PA.—The contract to erect an addition to the silk factory of the Mayfield Silk Co., has been awarded to S. SYKES & SONS, 1235 Penn Ave., Scranton. The building, exclusive of mechanical equipment, will cost about $15,000, and will be brick and frame. Each wing will be two stories in height, one being 60 × 62 ft., and the other 60 × 65 ft. Work will be started at once.

PHILADELPHIA, PA.—All sub-bids for the erection of a factory addition for Eugene Carraine, 1620 Mifflin St., this city, have been rejected, and the plans for all sub-bids are being revised. F. L. HOOVER & SONS, Builders' Exchange, Philadelphia, have the general contract and will receive sub-bids. The factory will be three stories high, 17 × 20 ft., of brick and steel construction. Werber Trumbauer, Crozer Bldg., is Arch.

D. Weber & Co., 511 Locust St., will build a factory on the southwest corner of Spruce and American Sts., Philadelphia. Plans are being drawn by George W. Rehfuss, 1524 Chestnut St. It will be of brick and terra cotta and five stories in height. Bids will be received about Dec. 1.

PHILADELPHIA, PA.—The contract for erecting the proposed shops for George P. Bauer, 1435 North 31st St., has been awarded to the PHILIP HAIBACK CONSTRUCTION CO., Thompson and 26th Sts., Philadelphia. The shops will be erected at 1415 North 31st St., and will be one story high of brick, 29 × 100 ft.

The contract to construct an addition to the printing plant of Allen, Lane & Scott, 1211 Clover St., this city, has been awarded to GEORGE L. SIPPS, 907 Walnut St. The building will be of brick, and will be started at once. J. F. Stuckert, 122 South 43rd St., Philadelphia, is the Arch.

SHIPPENBURG, PA.—The Shippenburg Table Mfg. Co., E. J. Kitzmiller, Gen. Mgr., is preparing plans for an addition to cost between $10,000 and $15,000, which will be built here. It will be one story in height, 30 × 60 ft., Contracts will be awarded during November, it is stated.

WAYNESBORO, PA.—The Geister Mfg. Co., manufacturers of farm machinery, will build a foundry at the plant, plans for which are being prepared by the Company's engineering department. It will be a brick building, one story in height, and will cost about $50,000. J. J. Eller is Gen. Mgr. and G. B. Beaver, Pur. Agt., with offices at the plant here. The construction of the building will not be started until next spring.

WILKES-BARRE, PA.—The First Catholic Slavak Union, 594 North Main St., has awarded the contract for building a printing plant in Swatara Township, near here, to C WESTREYER, of Lemoyne, Pa. It will be of brick and terra cotta, two stories high, 40 × 120 ft. Reilley & Schroeder, Bennett Bldg., Wilkes-Barre, are the Archs.

WILKES-BARRE, PA.—J. R. Perry, West Jackson St., is having plans prepared for a 4-story concrete factory, for the purpose of manufacturing vacuum cleaners.

BALTIMORE, MD.—We are officially advised that the general contract to erect the proposed train shed at the Union Station, for the Pennsylvania R. R. Co., has been awarded to the McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg, Pa. It will be fireproof and of steel and concrete construction. Lincoln Bush, 1 Madison Ave., New York, is Consult, Engr.

CURTIS BAY (Baltimore post-office), MD.—The Baltimore Siegwart Building Co., of which Daniel A. Leonard, Pres., of the National Hydraulic Stone Co., is promoter, will construct a cement product plant at Curtis Bay, Anne Arundel County.

WHEELING, W. VA.—J. E. Moss, Gen. Mgr. of the J. E. Moss Iron Works has stated that his company will shortly erect a plant in this city, for the manufacture of structural iron and steel, fences, wire and steel for concrete reinforcing.

ATLANTA, GA.—At a recent meeting of the Directors of the Atlantic Ice & Coal Corporation, it was decided to appropriate $350,000 with which to build additional ice manufacturing and storage plants in Atlanta and additions on plants in Georgia and Florida. Of this amount $150,000 will be spent in Atlanta, and $20,000 in Georgia and Florida. The capacity of the plant in West End is to be doubled and manufacturing and refrigerating plants will be built in Inman yards. Plants at Chattanooga, Macon, Jacksonville, Augusta, Rome and Columbus will also be improved. The officers of the Atlantic Ice & Coal Corporations are: Ernest Woodruff, Pres.; W. E. Chapin and W. J. Rushton, Vice-Pres.

UNION CITY, GA.—Reports state that George H. Bruning and associates are planing the organization of a stock company to build hosiery and underwear knitting mills, each plant to employ several hundred operatives. It is eunderstood that Eastern capitalists will be interested in these enterprises.

JACKSONVILLE, FLA.—The American Agriculture & Chemical Co. will make extensive improvements to its plant on Talleyrand Ave., near 21st St. A dry dock, 225 × 30 ft., will be constructed. A new tower hoist and a modern bag factory will be erected on the grounds.

SANFORD, FLA.—The Virginia Carolina Chemical Co. has selected this city as its headquarters in the manufacture and distribution of fertilizers. The company has purchased a lot, 200 × 1,200 ft. and arrangements are now being made for the construction of extensive dock facilities on the river. The first building to be erected will be 150 × 250 ft.

CLEVELAND, OHIO.—The Tennis-Euclid Improvement Co. plans to erect a knitting factory, at 1967 East 57th St. The building will cover ground 60 × 100 ft., and will be six stories in height. The construction will be of brick and concrete. Colwell & Sherman are the Archs. The building is estimated to cost $65,000.

We are officially advised that the general contract for constructing a foundry and power house, 200 × 48 ft., and 162 × 48 ft., for the Chandler & Price Co., has been awarded to the W. B. McALLISTER CO., 2165 East 31st St., Cleveland, and the steel contract was let to the RIVERSIDE BRIDGE CO. The structure will be three stories high and a basement and will be fireproof. S. A. Hand, 6000 Carnegie Ave., is Mgr.

FINDLAY, OHIO.—The Deisel-Wemmer Co., cigar manufacturers, of Lima, are negotiating for the establishing of a branch of their factory in this city to employ over 500 people.

MARION, OHIO.—The Marion Shovel & Dredge Co. has let the contract for the foundation and structural steel work of the proposed steam shovel shops to be erected on a 125-tract of land lying south of Bellefontaine Ave. and east of the Hocking Valley R. R., to the BELLEFONTAINE BRIDGE & STEEL CO. of Bellefontaine. Work has already been started on the contract, which includes 4 buildings, 120 × 210 ft., 60 × 210 ft.; 60 × 112 ft., and 50 × 100 ft. Each building is to be built with a concrete block foundation extending to the window sills, the remainder of the building to be constructed of sheeting and corrugated iron. A. E. Cheney is Gen. Mgr.

SANDUSKY, OHIO.—The Suspension Roller Bearings Co., recently organized, with a capital of $250,000, plans the erection of various buildings in Sandusky. About 1,000 men will be given employment, it is said. The concern will manufacture roller bearings applicable to vehicles of all kinds and all kinds of shafting.

TOLEDO, OHIO.—The Railway Material Co., 84 Van Buren St., Chicago, the concern that established a branch plant in this city some time ago, is having plans made by Bacon & Huber, Archs., The Spitzer, Toledo, for an addition to its building on Wheeling St. and the Terminal Belt R. R. The proposed building is to be used as a foundry and will be 60 × 140 ft. The contract will be let soon.

TOLEDO, OHIO.—The Gendron Wheel Co. plans to add another addition to its plant at Superior, Jackson and Orange Sts. The proposed building is to be erected on Jackson St. adjoining the addition built several years ago. It will have a frontage of 50 ft. and a depth of 100 ft. and will contain five stories and basement. Plans have been prepared by Langdon & Hohly, Archs., The Nicholas, Toledo. It will cost about $25,000 and will be of mill construction and will be used by the company for the purpose of storing finished goods.

WAREN, OHIO.—THE SAMUEL AUSTIN & SONS CO., 4401 Broadway, Cleveland, has been awarded the contract for erecting the proposed factory building here for the Vulcan Furnace Co., of Detroit, Mich. Estimated cost, $60,000. Noted on Oct. 6.

CAMDEN, IND. — The BURREL ENGINEERING & CONSTRUCTION CO., 108 La Salle St., Chicago, Ill., has the contract for erecting a 20,000 bushel capacity grain elevator for the Farmers Elevator & Supply Co. at Camden. It will be of crib construction with sheet metal siding.

INDIANAPOLIS, IND.—The Bishop & Babcock Co., has announced that the plant recently destroyed by fire will be rebuilt on a larger scale. Bids will be received as soon as plans are completed. E. J. Kane is Mgr.

MISHAWAKA, IND.—The Fostoria Aluminum Mfg. Co., B. E. Rockoff, Pres., has awarded a contract to BLOOMER BROS. for the erection of a fireproof and waterproof foundry shop and office building in this city.

PRINCETON, IND.—F. H. Elmore, Inspector for the Southern Ry. Co., announces that the shops recently destroyed by fire at this place, will be rebuilt. The loss was $150,000. The new shops will be larger than the old shop. Bids will be asked for as soon as the insurance is adjusted and plans completed.

DETROIT, MICH.—Louis Kamper, Fine Arts Bldg., let the following contracts on Oct. 3 for the proposed 2-story factory, 65 × 200 ft., for the Hale Motor & Machine Co., S. E. Hale, Mgr., 301 Lennox Apartments: Masonry to OTTO T. MISCH, Home Bank Bldg.; carpentry to ALFRED PERRY, 272 Clark Ave.; composition roofing to R. HULTON & CO., 112 Fort St. E.; steam heating and plumbing to A. L. WATENSPERGER, 1165 Jefferson St. Cost, $25,000.

The Arthur Colton Machine Co., Brush and Macomb Sts., is contemplating erecting a new plant for the manufacture of special machinery and patterns. The plant will be two stories high and a basement.

The Detroit Steel Products Co., H. W. Dalkin, Mgr., Griffen St. and Boulevard, is having plans prepared for a new forge shop in connection with its present plant. John Scott & Co., Ford Bldg., are the Archs.

The Edison Illuminating Co., Alex Dow, Mgr., Washington Ave. and State St., let the general contract on Oct. 3 for the new engine room, to A. A. ALBRECHT CO., Penobscot Bldg.

George D. Mason, 80 Griswold St., has let the general contract for the proposed reinforced concrete factory building, two stories high, 80 × 300 ft., for the Anderson Carriage Co., W. C. Anderson, Pres., Riopelle and Clay Sts., to E. P. DECKER & CO., 80 Griswold St. The general contractor is taking bids on steam heating. Cost of buildings, $25,000.

DETROIT, MICH.—The Phoenix Wire Works, Kirby and Dequindre Sts., which was destroyed by fire recently, announces that the plant will be rebuilt, immediately, at a cost of $30,000. S. M. Clark is Secy.

ECORSE, MICH.—The Peninsular Salt Co., H. N. Hovey, Pres., Hammond Bldg., Detroit, has been capitalized at $1,000,000, and is arranging to establish a large soda ash works in Ecorse.

KALAMAZOO, MICH.—The Upjohn Co., H. B. Osborn, Secy., 223 East Lovell St., is contemplating the erection of a manufacturing building, for the manufacture of drugs. Plans will mature soon.

MARSHALL, MICH.—Bids will be received about Nov. 1, by the De Vere-Gormley Co., Ohio Bldg., Toledo, Ohio, for the erection of a foundry, office, storage building, etc., for the Marshall Furnace Co., at Marshall. The structures will be 154 × 254 ft., 40 × 50 ft., 140 × 160 ft., and 36 × 50 ft. They will be of steel, concrete, brick, glass, etc., and 1-story high. Estimated cost, $45,000. Noted last week.

SAGINAW, MICH.—The Gates-Uphold Co., Henry Uphold, Mgr., Dearborn, Mich., will soon erect a 1-story factory, 60 × 90 ft., here. The building to be constructed of cement blocks.

CHICAGO, ILL.—A. S. Alschuler, Arch., 39 Jackson Boulevard, has awarded the following contracts: Masonry to A. LUND and carpentry to JACOB SCHARMER, 215 Dearborn St., for a 5-story factory, 106 × 125 ft., at Jackson Boulevard and Peoria St., for M. L. Oberndorf. It will be of brick and mill construction with electric freight elevators, steam heating and fireproof windows. Noted on Sept. 29.

C. A. Eckstorm, Arch., 131 La Salle St., has awarded the following contracts: elevators to the OTIS ELEVATOR CO. and glazing to JAMES H. RICE for an 8-story factory, 100 × 125 ft., at Sangamon and Van Buren Sts., for L. Kiper & Son, 500 South Peoria St. It is to be of brick and mill construction. Noted on Oct. 13.

Orton & Steinbrenner, Engrs., 181 La Salle St., are preparing plans for a 1-story factory 120 × 150 ft. to cost $15,000. It will be of concrete and brick construction, with composition roof and cement floor.

C. A. Eckstein, 131 La Salle St., is receiving estimates for a 3-story factory, 20 × 75 ft., at 507-509 East 39th St., for the F. B. Williams Co. It will be of brick and mill construction with electric freight elevators, steam heating and fireproof windows.

William G. Krieg, Arch., 172 Washington St., is preparing plans for a 3-story factory, 60 × 100 ft., at Milwaukee Ave. and Robey St. It will be of brick construction, with steam heating and fireproof windows.

Huehl & Schmidt, Archs., 163 Randolph St., have completed plans for a 2-story factory, 50 × 103 ft., to be erected at Forquer and Halsted Sts., for Voltz Bros. It will be of brick and mill construction, with fireproof windows, electric freight elevator and steam heating.

CHICAGO, ILL.—F. E. Davidson, Arch., 98 Jackson Boulevard, has awarded the masonry and carpentry contract to W. L. HOFFMAN, plumbing to J. C. McFARLAND, structural steel work to VIERLING & McDOWELL, metal doors to the VARIETY MFG CO., for a 5-story warehouse, 75 × 175 ft., at Lafin St. and Monroe Ave., for Walter E. Olson. It will be of standard brick and mill construction, with fireproof windows, steam heating and electric freight elevator. Noted on Sept. 29.

Ottenheimer, Stern & Reichert, Archs., 134 Monroe St., have awarded the structural steel work contract to HANSELL-ELCOCK CO., Archer Ave. and Butler St.; iron doors to the VARIETY MFG. CO.; and glass to the PITTSBURG PLATE GLASS CO., for a 3-story factory, 95 × 425 ft., to cost $150,000, at 20th St. and Western Ave., for G. D. Glaser, 703 West Washington Boulevard. Other contracts were noted last week.

Fritz Foltz, Arch., 140 Dearborn St., has awarded the masonry and carpentry contract to FORD & PHILLIPS, 18 Lomax Pl., for a 1-story box factory, 48 × 222 ft., at Union and Lumber Sts., for Rathborne, Hair & Ridgway, 2279 South Union Ave. It is to be of concrete and brick construction, with composition roof, skylights and cement flooring. Estimates for a new dock in connection are being received.

A. S. Alschuler, 39 Jackson Boulevard, is preparing plans for a 4-story factory, 127 × 165 ft., to be erected at the southwest corner of Morgan and 21st Sts., for I. & S. Lanski. It will be of reinforced concrete, standard brick and mill construction, with fireproof windows, fire escapes, sprinkler system, steam heating and electric freight elevator.

S. N. Crowen, Arch., 108 La Salle St., is receiving estimates for a 4-story building, 100 ft. square, at Cass and Ontario Sts., for the Popular Mechanics Publishing Co. It will be of brick and mill construction, with fireproof windows, steam heating and electric elevators.

MOLINE, ILL.—The Moline Pump Co. has decided to locate its new plant in Ottumwa. It will be erected at a cost of $45,000 and will include a 2-story warehouse and office building, 80 × 150 ft.; a foundry, 80 × 120 ft.; machine shop, 100 × 200 ft.; engine room, 40 × 60 ft., and a paint shop, 60 × 80 ft.

MERRILL, WIS.—WILLIAM HARROLD, of Wausau, has secured the contract for rebuilding the sawmill plant of the Wright Lumber Co., in this city. The building will be 42 × 162 ft.

MILWAUKEE, WIS.—The U. S. Gypsum Co. is preparing plans and will erect a new factory building at the foot of Grove St. Cost, $15,000.

The Wetmore Adding Machine Co., recently incorporated with a capital stock of

$750,000, is planning the erection of a factory building to contain 25,000 sq. ft. of floor space.

We are officially advised that the contract for erecting a 4-story reinforced concrete fireproof factory, 70 × 150 ft., has been awarded to HENRY DANISCHEFSKY, North Ave. and Lake Drive, for the Kiel Furniture Co., on 32d St., between Wright and Clarke Sts. Van Ryn & De Gelleke, Caswell Block, are the Archs. Noted last week.

RACINE, WIS.—Lloyd G. McCrum, Pres., of the McCrum Howell Co., recently announced that the company would soon commence the erection of a 4-story fireproof addition to its local plant. The building will be used for the manufacture of motors for a stationary vacuum cleaner, having a capacity of 10,000 motors annually.

SCHOFIELD, WIS.—The D. J. MURRAY CO., of Eau Claire, has been awarded the contract for preparing plans and erecting a sawmill plant for John D. Ross, at Schofield, who is now sole owner of the Brooks & Ross Lumber Co.

ST. PAUL, MINN.—The Minnesota Butter & Cheese Co. will build a 3-story pressed brick and concrete addition to their factory on Third St., near Cedar St., according to plans of J. Walter Stevens, New York Life Bldg. The contract has been awarded to the W. J. HOY CONSTRUCTION CO., Metropolitan Bldg., St. Paul. Cost, $35,000.

WINONA, MINN. — C. A. Eckstorm, Arch., 131 La Salle St., Chicago, Ill., has awarded the steam heating contract to SHERMAN & SON and electric work to the KLEIN ELECTRIC CO., of Winona, for a 6-story factory, 94 × 139 ft., for the Watkin Medical Co., at Winona.

KANSAS CITY, MO.—The Chittenden-Eastman Furniture Co., of Burlington, Iowa, has decided to erect a plant in Kansas City, to include a mattress factory and a furniture jobbing house. The firm is capitalized at about $750,000. Justin A. Runyan is Industrial Comr. of the Commercial Club, Kansas City.

CONCRETE, WASH.—John C. Eden, Pres. of the Superior Portland Cement Co. of this city and the American Bank Bldg., Seattle, stated that improvements, involving the expenditure of about $1,000,000 would be made to the plant here. Two new ball mills and a steam auxiliary plant will be installed.

SEATTLE, WASH.—The Pacific Ammonia & Chemical Co., Northlake Ave. and Blewett St., have issued a statement to the effect that if the city will provide an outlet from Lake Union to Salmon Bay, that company will at once begin the immediate erection of a $1,000,000 plant for the manufacturing of their products. R. P. Greer is Mgr.

GEORGETOWN, WASH.—Bids will be received soon for the piling, crushed rock, sand, iron and pipe work at the office of Hans Pederson, 1224 Alaska Bldg., Seattle, to be installed in the $45,000 roundhouse to be constructed at Argo station, near Georgetown, for the Oregon & Washington Ry. Co.

SPOKANE, WASH.—The contract for building the roof over the new plant of the Union Iron Works, which replaces the old plant destroyed by fire a few months ago, has been let to the ENGINEERING CONSTRUCTION CO., National Bank Bldg. S. H. Knight is Ch. Engr., and E. J. Riner is Supt. of the Construction Co. This roof will contain 27,000 sq. ft.

KLAMATH FALLS, ORE.—W. I. Clarke of the Klamath Lumber Co., announced recently, it is stated, that a sawmill is to be erected in Shippington, on Upper Klamath Lake, on property owned by Mr. Clarke and George A. Innes.

LOS ANGELES, CAL.—Plans for the construction of a plant for the manufacture of chemicals in this city, have been completed by Henry Blumenberg of the Braun Chemical Co. and associates. Bids for the buildings to be erected are now being received. The corporation will be known as the Southern California Chemical Co. and the plant will be situated on a 5-acre tract between Santa Fe and Compton Aves., near Slauson Ave. F. C. Ripley, W. D. Stephens, C. A. Fellows, W. W. Woods and Ward Chapman are associated with Mr. Blumenberg. Estimated cost of buildings, $100,000.

A. F. Rosenheim, Arch., H. W. Hellman Bldg., is preparing plans for a factory building to be erected at Pico and Georgia Sts., for the American Biograph Co. of New York. It will be 30 × 150 ft., frame, with an annex, 10 × 40 ft.

REDONDO BEACH, CAL.—Management of the Hermosa Beach box factory is considering plans for the enlargement of the plant. Three additional acres of land have been purchased.

SACRAMENTO, CAL.—See item under Buildings.

HUNTINGTON BEACH, CAL.—A new sugar factory is to be built in Orange County, by Holly Sugar Co., of Colorado, near Huntington Beach. W. M. Wiley is Pres. and General Mgr. of the new company and is now at Huntington Beach making arrangements for the factory. S. W. Sinsheimer is Constr. Engr.

QUEBEC, QUE.—Price Bros., of London, England, will erect a paper mill near here with a daily capacity of 150 tons. Address William Price, M. P., at Quebec.

HAMILTON, ONT.—The Acme Motor Carriage & Machinery Co., capitalized at $1,000,000 has been organized to manufacture automobiles, taxicabs, carriages and road machinery. The new concern is a merger of the Baynes Carriage Co. of this city and the American Good Roads Machinery Co. of Goderich, and some Detroit automobile men, and the plant of the Baynes Co. will be greatly enlarged and the products made there. The new concern will employ about 150 hands, and the directors are: S. Jones Phillips, Kennet Square, Pa.; F. W. Woods and R. F. Mancill of Goderich, represented the American Road Machinery Co.; M. W. Best and D. P. Perry, Detroit, representing the automobile interests, and W. Southam, H. N. Kittson and P. D. Crerar, K.C., representing the Baynes Carriage Co.

WELLAND, ONT.—The United Motors, Ltd., recently incorporated, will build the first airship factory in Canada at Welland, for the manufacturing of airships.

WINDSOR, ONT.—The Imperial Electric Co., E. J. Rumsey and A. W. Rumsey, 327 Jefferson Ave., Detroit, Mich., will soon erect a plant in Windsor for the manufacture of magnetos, it is reported.

PENTICTON, B. C.—The Penticton Lumber Co. has been incorporated for the purpose of erecting a sawmill and factory for the manufacture of piping for irrigation purposes. The company owns 11,000 acres of tamarac, and the capital is $200,000.

REGINA, SASK.—The Toronto Wire & Iron Works Co., of Toronto, Ont., have decided to locate here and will erect a factory.

COCAPAH, MEX.—The Cudahy Co., which has purchased a 32,000-acre tract from the Inter-California Land Co., at Cocopah, has completed plans for first improvement to be put on property. It will be a building, 100 ft. square, and two stories high.

MISCELLANEOUS CONTRACTS.

(* *Denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

ICE-HOUSE.—Fort McKinley (Portland post-office), Me.—The contract for the construction of a frame ice-house here, bids opened on Oct. 5 by the Constructing quartermaster, Portland, has been awarded to R. D. SHANAHAN, 102 Exchange St., Portland, at $3,889.

SEA WALL.—North Scituate, Mass.—The contract for taking down and rebuilding the sea wall at North Scituate Beach, extending from the Osgood cottages on the north, a distance of 1,050 ft. southerly, has been awarded to JAMES H. FERGUSON, 22 Parkman St., Dorchester, Mass. Bids were opened on Oct. 18.

DREDGING.—Boston, Mass.—Bids were received as follows by Col. Frederic V. Abbott, Corps Engrs., U. S. A., Boston, on Oct. 17 for dredging in the Mystic River: (a) dredging, including boulders not exceeding 2 cu. yds. each; (b) removing boulders exceeding 2 cu. yds.: Daly & Hannan Dredging Co., Ogdensburg, N. Y., (a) 25 9-10 cts. per cu. yd.; (b) $12. Bay State Dredging Co., 185 Summer St., Boston, (a) 27¼ cts.; (b) $6. Eastern Dredging Co., 247 Atlantic Ave., Boston, (a) 26 7-10 cts.; (b) $10.

*DREDGING.—Boston, Mass.—Bids were received as follows by Col. Frederic V. Abbott, Corps Engrs., U. S. A., Boston, on Oct. 19, for dredging in Lynn Harbor: (a) dredging, scow measurement; (b) removing boulders exceeding 2 cu. yds. each: Charles M. Cole, Fall River, Mass., (a) 22 cts. per cu. yd., (b) $10; Bay State Dredging Co., 185 Summer St., Boston, (a) 21.4 cts., (b) $10; Daly & Hannan Dredging Co., Ogdensburg, N. Y., (a) 23.4 cts., (b) $12; Eastern Dredging Co., 247 Atlantic Ave., Boston, (a) 22.1 cts., (b) $8.

DREDGING. — Boston, Mass. — Bids will be received until noon, Nov. 23, by Col. Frederick V. Abbot, Corps Engrs., U. S. A., for dredging in the Merrimac River, Mass.

REPAIRING SCOW.—Boston, Mass.—Bids will be received by Louis K. Rourke, Supt. of Streets, until Oct. 28, for repairing a dumping scow.

PIER.—Boston, Mass.—Bids were received as follows on Oct. 22 by the Bureau or Yards and Docks, Navy Dept., Washington, D. C., for a pier between Piers 4 and 5, U. S. Navy Yard, Boston: Luke D. Mullen, 161 Devonshire St., Boston, $32,900; Lawler Bros., 16 City Sq., Charlestown, Mass., $30,126; Riverside Contracting Co., 39 Cortlandt St., New York, $27,918; W. S. Rendle & Son, 135 Prescott St., East Boston, $31,123; Wm. H. Keyes & Co., 95 Milk St., Boston, $36,801 and $43,801; Wm. H. Ellis, 18 Tremont St., Boston, $38,365; Wm. L. Miller, 19 Milk St., Boston, $36,900 and $32,873; Rendle & Stoddard, 333 Border St., East Boston, $39,776.

PIER. — Boston, Mass. — Bids were received as follows on Oct. 22 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for improvements to Pier No. 1, Navy Yard, Boston: C. M. Leach, P. O. Box 2285, Boston, Item (1)—$16,873, (2) $18,983, (3) $20,673; (4) $4,790; (5) $1,000 add. Luke D. Mullen, 161 Devonshire St., Boston, Item (1) $19,489, (2) $21,395, (3) $25,000, (4) $7,000, (5) $200.

*DREDGING.—New York, N. Y.—Bids were received as follows by Col. William T. Rossell, Corps Engrs., U. S. A., Army Bldg., New York, on Oct. 21, for dredging in channel north of Shooters Island, N. Y., and N. J.: R. G. Packard Co., 37 cts. per cu. yd; William Beard & Co., 15 cts.; Daly & Kennan Dredging Co., 20 cts.; Morris & Cummings Dredging Co., 15 cts.; Atlantic Dredging & Contracting Co., 17 cts.; U. S. Dredging & Contracting Co., 22 cts.; Taylor Dredging Co., 15 cts.

IRON RAILINGS, WALL. — New York, N. Y.—Bids will be received by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 3.30 p m., Nov. 7, for new iron railings, etc., at public schools 34, 93, 110, 179 and Stuyvesant High School; and also for brick wall enclosing athletic field at High School of Commerce, Boro. Manhattan.

*SUBWAY SYSTEM, ETC. — New York, N. Y.—No bids were received on Oct. 20, at the office of the Public Service Commission, First District, 154 Nassau St., New York, for construction, equipment and operation of the Tri-Borough Subway and Elevated System of New York City, comprising about 44 miles of line.

*DREDGING.—New York, N. Y.—Bids will be received by Col. William T. Rossell, Corps Engrs., U. S A, Army Bldg, New York, until Nov. 22 for dredging in Keyport Harbor, Matawan Creek, Raritan and South Rivers, Shoal Harbor and Compton Creek and Cheesequake Creek, N. J.

AVIARY, ETC.—New York, N. Y.—Bids will be received by the Park Board until 3 p. m., Nov. 3, for furnishing all the labor and materials for the erection and completion of an aviary and winter house for eagles and vultures in the New York Zoological Park, in Bronx Park, Boro. The Bronx.

REPAIRING PIER.—New York, N. Y.—Bids were received on Oct. 20 by Colon Tomkins, Comr. of Docks, for repairing the pier at Rossville, Staten Island, Boro. of Richmond. The lowest bidder was N. Cappiello, 367 Fulton St., Brooklyn.

WHARF.—Niagara Falls, N. Y.—W. W. Robins, Engr. of Water Comn., and R. A. McClanathan, City Engr, have prepared preliminary plans, it is reported, for the construction of a wharf along the upper river. Estimated cost, $33,000.

PIER.—New York, N. Y.—The contract for the construction of a pier from the mainland to Cobb Dock, Pier D, Navy Yard, Brooklyn, N. Y., has been awarded to E. DE V. TOMPKINS, 81 East 125th St., New York, at $75,940.

SHED.—Elizabeth, N. J.—Bids will be received by the city until Nov. 1 for the erection of a 2-story steel frame shed on the recreation pier. W. H. Luster, Jr., is City Surv.

WHARVES.—Jersey City, N. J.—Surveys are being made for the construction of public wharves along the Hackensack River. C. H. Van Keuren is Ch. Engr. Noted on Oct. 20.

CANAL.—Trenton, N. J.—The Governor has appointed a committee to act with the New York, Trenton & Philadelphia Deeper Waterway Association in furthering the project for a ship canal across the state, in accordance with a resolution passed recently by that organization. The committee consists of the following: Fred. W. Donnelly, Trenton; David Baird, Camden; Peter Campbell, Newark; Samuel Hebiner, Spring Lake; Benjamin F. S. Brown, Matawan.

DREDGING.—Newark, N. J.—The Board of Street and Water Commissioners will receive bids until Nov. 3, for dredging about 12,500 cu. yds. along the docks of the Passaic River along the Newark water front. M. R. Sherrerd is Ch. Engr.

*CONCRETE MONUMENTS.—Ventnor City, N. J.—Bids for furnishing and placing concrete monuments will be received by the Common Council until Nov. 2. W. I. Risley is City Engr.

DIKE.—Dorranceton (Wilkes-Barre post-office), Pa.—Bids were opened on Oct. 7 by the Joint Dike Committee of the boroughs of Kingston and Dorranceton, for constructing a dike fill composed of about 103,000 cu. yds., as follows: B. G. Coon Construction Co., Wilkes-Barre, 34 cts. per cu. yd.; R. M. Rosser, 54 cts.

DREDGING.—Wilmington, Del.—Bids will be received by Major R. R. Raymond, Corps Engrs., U. S. A., until noon, Nov. 15, for dredging Mispillion River, Del.

*DREDGING.—Baltimore, Md.—Bids were received as follows by Col. Thomas L. Casey, Corps Engrs., U. S. A., Baltimore, on Oct. 18, for dredging in Patapsco River, Md., about 400,000 cu. yds.: P. Sanford Ross, Inc., Jersey City, N. J., 16.7 cts. per cu. yd; Coastwise Dredging Co, Norfolk, Va., 16.2 cts.; Maryland Dredging & Contracting Co., Baltimore, Md., 15 cts.; Sanford & Brooks Co., Baltimore, 16½ cts.

LIFE-SAVING STATION.—Washington, D. C.—Bids were opened on Oct. 14, by the Life Saving Service, Washington, for the construction of a life saving station at Green Hill, R. I., Third District, as follows: H. T. Kenyon & Co., Westerly, R. I., $12,875; five months; if cottage is moved 150 ft. add $185.

SHEET COPPER, ETC.—Washington, D. C.—Bids will be received until Nov. 1 by the Bureau Supplies and Accounts, Navy Dept., Washington, for furnishing at the navy yard and naval stations the following supplies: Mare Island, Cal., Schedule 2965, 8,300 lbs. sheet copper and 1,200 lbs. copper bar; 44,800 lbs. tin ingots; 600 lbs. naval bronze and 180 lbs. sheet brass; 15,850 lbs. steel bolts and nuts. Schedule 2966, 17,500 lbs. seamless drawn brass pipe; check and low pressure valves. North Chicago, Ill., Schedule 2972, furnishing and installing a crane and seven trolleys at naval training station; Brooklyn, N. Y., Schedule 2973, 300 M. ft. yellow pine decking; 60 M. ft. yellow pine; 300 M. ft. yellow pine sawn timber. Applications for proposals should designate the schedules desired by number.

CABLE.—Washington, D. C.—The following bids were received by the Chief Signal Officer, U. S. A., Washington, on Oct. 17, for Item 1, 4,000 ft. cable, and Item 2, 2,000 ft. same: National Conduit & Cable Co., Philadelphia, Pa. Item 1 30.3 cts., (2) 34.3 cts.; American Electrical Works, Phillipsdale, R. I., (1) 25.2 cts., (2) 28.8 cts.; Standard Underground Cable Co., Pittsburg, Pa., (1) 27.4 cts. and 39.9 cts., (2) 31 cts. and 45.4 cts.; WESTERN ELECTRIC CO., 57 Bethune St., New York, (1) 25 cts. and 40.1 cts., (2) 28.8 cts. and 46 cts. (awarded contract); Waterbury Co., New York, (1) 26.2 cts., (2) 29.8 cts.

*DREDGING.—Norfolk, Va.—Bids were received by Lieut. Col. Mason M. Patrick, Corps Engrs., U. S. A., Norfolk, for dredging in Pagin River, Va., about 17,000 cu. yds.: W. H. French, Norfolk, 21 cts. per cu. yd., $3,570; Norfolk Dredging Co., Norfolk, 17.9 cts., $3,043.

COAL AND ASH HANDLING APPARATUS—Norfolk, Va. — Bids will be received until 11 a. m., Dec. 3 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for coal and ash handling apparatus for the central power station at the U. S. Navy Yard, as per Specification No. 1750. Estimated cost, $24,000. R. C. Holliday is Ch. of Bureau.

TIPPLE.—Fairmont, W. Va.—The contract has been awarded to FAIRMONT MINING MACHINE CO. for the erection of the new tipple at the Owing mine of the Consolidated Coal Co. J. C. Gaskill, Engr., Consolidation Co., is in charge.

BRICK.—Grafton, W. Va.—The Baltimore & Ohio R. R. Co. has awarded the contract for 7,000,000 brick to be used in the construction of the new Kingwood tunnel to the THORNTON FIREBRICK CO., Grafton.

MINE RESCUE STATION. — Huntington, W. Va.—The Department of the Interior, Washington, D. C., has purchased a piece of property, 90 × 100 ft. for the erection of the mine rescue station which was authorized for this city at the last session of Congress.

RETAINING WALL.—Wheeling, W. Va.—The Council, on Oct. 18, approved the contract made by the board of control with JACOVETTY & KOEHNLINE for the erection of the concrete retaining wall on East Lind St. at $3,829. The wall is to contain about 550 cu. yds. of concrete. Charles B. Cooke is City Engr.

*TOWBOAT.—Wheeling, W. Va.—Bids were received as follows on Oct. 18 by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, for constructing and delivering steel hull stern-wheel towboat, "General Crighill": (a) delivered at Dam No. 26, Ohio River; (b) delivered at Pittsburg; (c) delivered at Jeffersonville, Ind.: Thomas M. Rees, Pittsburg, Pa., (a) $31,600; (b) $31,450. M. A. Sweeney Shipyard & Foundry Co., Jeffersonville, (a) $34,000; (c) $33,600. Ed. J. Howard, Jeffersonville, (a) $27,550; (c) $27,100. J. M. Hammitt, Marietta, Ohio, (a) $39,800.

*DAM, TRESTLES.—Wheeling, W. Va.—Bids were received on Oct. 12, by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling, for furnishing and delivered steel Poireedam trestles as follows: (a) Dam 11, 120,000 lbs. structural steel, per lb., (b) Dam 13, 120,000 lbs., (c) Dam 18, 120,000 lbs., (d) totals: Pittsburg Bridge & Iron Works, Rochester, Pa., (a) 3.85 cts., (b) 3.9 cts., (c) 3.95 cts., (d) $14,040; New Jersey Foundry & Machine Co., New York, (a) (b) and (c), 3.41 cts., (d) $12,276; W. N. Kratzer & Co., Pittsburg, (a) 3.3 cts., (b) 3.35 cts., (c) 3.4 cts., (d) $12,060; Independent Bridge Co., Pittsburg, (a) 3.67 cts., (b) 3.68 cts., (c) 3.74 cts., (d) $13,308. American Bridge Co., New York, (a), (b) and (c) 3 cts., (d) $10,800; J. & J. B. Milholland Co., Pittsburg, (a) 3.55 cts., (b) 3.5 cts., (c) 3.6 cts., (d) $12,780; Sterrit-Thomas Foundry Co., Pittsburg, (a) 3.5 cts., (b) 3.55 cts., (c) 3.6 cts., (d) $12,780.

*DREDGING.—Wilmington, N. C.—Bids were received as follows on Oct. 20 by Capt. Earl I. Brown, Corps Engrs., U. S. A., Washington, for dredging in Trent River, New River, etc.: Miner Engineering Co., Washington, D. C., Trent River, rock, $3; dredging 24 cts.; New River, $1, and 18 cts.; waterways, dredging, 20 cts. It was recommended that the bid be rejected.

CEMENT.—Atlanta, Ga.—The contract for furnishing 10,000 barrels of cement for the U. S. penitentiary here, has been awarded to SCIPLE SONS, of Atlanta, Ga., at $1.82 per bbl., deducting 7.5 cts. each for the cotton bags.

*DREDGING.—Jacksonville, Fla. — The Hillsboro Dredging Co., Tampa, Fla., submitted the lowest bid to Capt. George R. Spaulding, Corps Engrs., U. S. A., on Oct. 10, for dredging in channel from Clearwater Harbor to Tampa Bay, Fla., at 13.75 cts. per cu. yd.

AIR COMPRESSOR.—Birmingham, Ala.—The Southern Equipment Co., 2601 23d Ave., North, Birmingham, is in the market, it is reported, for an air compressor direct-connected to an alternating current, 2-phase, 220-250-volt motor; the compressor to be capable of lifting 1,000,000 gallons of water 80 ft., every 24 hours.

WHARF.—Mobile, Ala.—The City Wharf Committee, Arthur E. Stiles, Chn., will recommend to the City Council bulkheading the city wharf from St. Anthony to St. Francis Sts.; improvement consists in driving 45-ft. pilings at wharf front and laying 10 ft. plank wharf. The old wharfing will be removed and river property filled to a level with plank wharf by company receiving contract for dredging. The Committee will recommend that the dredging contract be awarded to the Home Dredging Co., of Mobile. Estimated cost, $12,000.

CONCRETE WALL.—Birmingham, Ala.—The contract has been awarded to DUNN & LALLANDE BROS., Birmingham, for constructing a reinforced concrete wall here, at $8,648.

GRAVEL, ETC.—Moss Point, Miss.—Bids well be received by C. M. Fairley, City Clk., until 7.30 p. m., Nov. 1, for furnishing 6,000 to 8,000 yds. of gravel and 40,000 to 50,000 bbls. of clam or oyster shells, delivered on dock at Moss Point.

*DREDGE, ETC.—Vicksburg, Miss.—Bids for steel hull self-producing hydraulic dredge, steel pontons and pipe line, and also for the component groups thereof, including steel dredge hull, steel pontons and pipe line upper works, steam plant, propelling machinery, electric plant, pumping engine, condenser plant, and evaporator, and pump, suction pipe and ladder, cutter head, gear and engine, winches and refrigerating plant, were received by Capt. Clarke S. Smith, Corps Engrs., U. S. A. on Oct. 20, as follows: Norborn Engineering Co., 312 Wenokla Bldg., Philadelphia, Pa., $3,000, and $16,500. American Bridge Co. of New York, Candler Bldg., Atlantic, Ga., $28,000; $27,000, $11,000, and $10,500. Mississippi Electric Co., Vallaburg, $1,750. Thomas M. Rees, P. O. Box 709, Pittsburg, Pa., $119,500, $117,000, $70,000, and $71,000. These bids were submitted under various groups under specification 17, copy of which is on file at the office of Engineering News, New York.

EARTHWORK.—New Orleans, La.—Bids wert received, as follows, on Oct. 13 by Capt. Robert R. Ralston, Corps Engrs., U. S. A., New Orleans, for constructing earth work in the Lower Tensas Levee District. Recommendations for awards have been made as follows: Evergreen Levee, 106,000 cu. yds., to

O. A. Gibson, Natchez, Miss., at 19 cts.; Harper's Levee, 36,500 cu. yds., to E. H. Jackson, Natchez, at 12.9 cts.; Kempe, Grassmere and Pittsfield Levees, 96,500, 102,500 and 103,500 cu. yds., to Hearin & Ryan, Baton Rouge, La., at 12.39 cts. for all.

LEVEE WORK.—New Orleans, La.—Bids were received on Oct. 7 by Maj. F. M. Kerr, Ch. Engr., State Bd. of Engrs., for levee work. Contracts have been awarded as follows: For the Orange Farm levee to GEORGE H. CONRAD, at 20.23 cts. per cu. yd.; Polas levee to Buras Church levee to PAT. J. LYONS, at 25.48 cts. per cu. yd. and $1.20 for revetment; for the Grand Bend levee to GEORGE WILSON at 12 cts. per cu. yd.; Cassandria to Experiment Plantation levee to same, at 14 cts. per cu. yd.

ROCK.—New Orleans, La.—Bids will be received by Capt. Robert R. Ralston, Corps Engrs., U. S. A., until 11 a. m., Nov. 5, for furnishing about 13,000 tons of rock for New Orleans Harbor.

LEVEE WORK.—Shreveport, La.—Bids will be received until Nov. 1 by the Board of Commissioners of Caddo Levee District, Shreveport, for levee work in Caddo Parish, on the Red River right bank, Upper Rush Point levee, Beard levee and Robson levee, approximately 35,000, 12,000 and 30,000 cu. yds., respectively.

WALL AND GATES, ETC.—Chalmette, La.—Bids will be received until 11 a. m., Nov. 14 by Lieut.-Col. Geo. B. Davis, Acting Q. M., U. S. A., Hibernia Bldg., New Orleans, for constructing a brick wall, furnishing new iron gates, etc., at Chalmette, La., National Cemetery.

*REMOVING DIKE, DREDGING.—Cincinnati, Ohio.—Bids will be received until noon, Nov. 23, by Maj. John C. Oakes, Corps Engrs., U. S. A., for removing Sand Creek dike and dredging in the Ohio River about 1¼ miles below Ravenswood, W. Va.

RETAINING WALL.—Ashtabula, Ohio.—Bids will be received by the Board of County Commissioners of Ashtabula County, until 1 p. m., Nov. 7, for the construction of a retaining wall and facing of wing of a Brown Bridge over Conneaut Creek, Conneaut township. A. V. Hillyer is Clk.

CULVERT, REVETMENT WALL.—Columbus, Ohio.—Bids will be received until Oct. 28 by the State Board Public Works, Columbus, James R. Marker, Ch. Engr., for constructing a culvert under the Miami and Erie Canal at Crawford's Run, city of Hamilton, and for constructing a concrete revetment wall adjacent to Crane Island, Buckeye Lake, Licking County.

MECHANICAL STOKERS.—Akron, Ohio.—Bids will be received by the Board of Education until noon, Nov. 22, for furnishinf and installing mechanical feed stokers to be applied to two 150 HP. return tube boilers, 72 in x 18 ft., set in battery, for the new South High School building, on Thornton and Coburn Sts. T. F. Barnhart is Clk.

DITCH.—Frankfort, Ind.—Bids will be received until Oct. 29 by M. V. Unger, Drainage Comr., Court House, Frankfort, for constructing the Morris T. Bailey ditch.

LEVEE—Princeton, Ind.—A survey is being made for the Commissioners of Gibson County, Princeton, for the construction of a levee along Patoka and Wabash Rivers. Estimated cost, $250,000.

CEMENT WALL.—Sault Ste Marie, Mich.—The construction of a new cement wall on the south side of the American canal at Sault Ste. Marie will begin as soon as the canal closes for the season. Plans for the improvement submitted to the War Department by Col. C. McD. Townsend, Corps Engrs., U. S. A., have been approved. Bids will be asked soon.

*CHAIN GRATE STOKERS.—Grand Rapids, Mich.—Bids will be received by the Board of Public Works, until 8 p. m., Nov. 3, for grate stokers for combination pumping and lighting station. Sampel A. Freshney is Secy. and Gen. Mgr.

DOCK. — Chicago, Ill. — See item under Manufacturing Plants.

DRAIN TILE.—Harvel, Ill.—The Drainage Commissioners of Sub-district No. 1 of Union Drainage District No. 2 of the Towns of King and Harvel, Town Hall, Harvel, will receive bids, November 3, 10 a. m., for furnishing the following drain tile, f. o. b. cars Harvel: 2,475 ft. 22.-in.; 4,125 ft 18-in., and 2,210 ft. 12-in. vitrified, glazed drain tile; 1,720 ft. 10-in. and 2,315 ft. 8-in., well burned, straight drain tile; also for unloading from cars, hauling out upon the line of work, and distributing said tiles, and for excavating trenches, laying said tiles and refilling the same, as follows: 22-in. drain, 150 rods, average depth 4.5 ft.; 18-in. drain, 250 rods, 3.6 ft.; 12-in. drains, 134 rods, 4.7 ft.; 10-in. drains, 104 rods, 3.6 ft.; 8-in. drains, 143 rods, 4.4 ft. Bids are to specify prices separately for furnishing tiles, for unloading from cars, hauling and distributing tiles; and for trenching, laying the tiles and refiling trenches after test and inspection. Bids for furnishing tiles and for hauling and distributing same will be by the foot or M ft.; for trenching, laying tiles and refilling trenches by the rod in length and ft. in depth.

DITCH.—Dahlgren, Ill.—The construction of a drainage ditch in Hamilton County, 42 miles in length, is being considered. Estimated cost $150,000 to $250,000. Chester C. Judd, Dahlgren, is Engr. G. W. Donley is Drainage Comr.

DREDGING.—Chicago, Ill.—The following bids have been received by the Sanitary District of Chicago for dredging north branch of Chicago River: (a) Division 1, dredging north branch Chicago River, 188,000 cu. yds.; (b) Division 2, dredging entrance to North Shore Channel, at Wilmette, Ill., about 4,400 cu. yds.: Great Lakes Dredge & Dock Co., Chicago (a) 32 cts. and 33.9 cts.; (b) 22 cts.; the Fitz Simons & Connell Co., Chicago, (a) 35 cts., (b) 30 cts.

DITCH WORK.—Morrisonville, Ill.—Contracts for ditch work, bids opened on Oct. 8, have been awarded as follows: For tile to WHITE HALL SEWER PIPE CO., at $12,-268; trenching to CARLIN BROS., Thomasville, Ill., at $4,323; hauling to EDGAR DICKEY, Morrinsonville, at $2,117; cleaning ditch to E. H. COWAN, La Verne, Iowa, at $4,755. J. W. Dappert is Engr., Taylorsville, Ill.

DRAINAGE CANAL. — Chicago, Ill. — The Drainage Board is asking for bids for four miles of ditch construction as part of the new drainage canal in the Calumet district. The new canal will connect the Calumet River, east of Blue Island, with the new link channel of the drainage canal, joining the latter at the Sag, and making the new link 16 miles long. The work of widening and deepening the river will make the entire distance through which dredging must be done about 20 miles. The ditch will be 28 ft. deep, with an average width of 65 ft.

DAM.—Momence, Ill.—A dam will be built here at once. Estimated cost, $15,000.

HARBOR IMPROVEMENT.—Oconto, Wis.—The citizens have voted $25,000 of bonds to improve the city's harbor. This amount, together with $75,000 appropriated by Congress, will be used in the construction of a 16-ft. channel and a turning basin.

HARBOR WORK.—Milwaukee, Wis. — Plans are being considered by the Milwaukee city authorities and government officials, it is reported, for the installation of a $6,-000,000 harbor project on Lake Michigan here. The plan includes the construction of a system of docks on Jones Island. Harry E. Briggs is Comr. Pub. Wks.

DITCH.—Elkhorn, Wis.—The Drainage Commissioners of Turtle Creek Drainage District No. 1 propose to construct 10.82 miles of main and lateral ditches. Estimated yardage, 198,000. The removal of two iron bridges, the construction of two new bridges and a small concrete dam is included in the proposed work. H. H. T. Uhles is Engr., Elkhorn.

LEVEE.—Council Bluffs, Iowa.—The contract has been awarded by the Board of Supervisors to M. J. KELLY, for constructing the levee along the Missouri River in Lewis Township, at 12 cts. per sq. yd., for approximately 8,500 yds., in Section 1, 17 cts. per yd. for 17,000 yds. in Section 2; and 15 cts. per yd. for 8,500 yds. in Section 3. The total cost is $5,185. The length of the levee will be about two miles and will require about 34,000 yds. of dirt.

DITCH WORK.—Burlington, Iowa.—Bids will be received until Oct. 28 for additional ditch work to be done in the Des Moines County Drainage District No. 1. The work includes about 7,800 cu. yds. of excavation in the "Yorkanut" drain, about 266,600 cu. yds. in Yellow Springs and Rock Hollow drains, and approximately 6,300 cu. yds. in three other short drains. The Harman Engineering Co., 120 Fredonia Ave., Peoria, Ill., will supervise construction.

HYPOCHLORIDE PLANT. — Brainerd, Minn.—The city will install a hypochloride plant for the treatment of river water used for drinking purposes.

DITCHES.—Crookston, Minn.—Bids will be received by H. J. Welte, County Audr., Polk County, until 10 a. m., Nov. 12, for the construction of Ditch No. 83, consisting of 22,671 yds. of excavation, and Ditch No. 84, 38,910 yds. of excavation.

PIERS.—Chisholm, Minn. — The Water, Light and Power Commission, has awarded the contract for erecting the piers under the new settling basins in connection with the city's water supply to JOSEPH CUMMINGS at $3,118.

DITCH.—Minneapolis, Minn.—Bids will be received until Nov. 7 by Hugh R. Scott, County Audr., for constructing Ditch No. 10 Estimated cost, $5,000.

DITCHES.—Blue Earth, Minn.—Bids will be received until Nov. 1 by Jesse L. Herring, County Audr., for constructing county ditches Nos. 8 and 9, approximating 157,916 yds. of excavation, and 76,000 ft. of 6 to 15-in. tile. Estimated cost, $15,791 and $16,-911, respectively.

DITCH.—Red Lake Falls, Minn.—The contract for constructing Ditch No. 47, approximating 99,428 yds. excavation and Ditch No. 48, approximating 321,128 yds. of excavation, has been awarded to DANIEL LINNIHAN, of Red Lake Falls. Estimated cost, $12,992, and $11,128, respectively. A. A. Latendresse is County Audr.

*BREAKWATER.—Duluth, Minn.—Bids will be received by Lieut.-Col. Graham D. Fitch, Corps Engrs., U. S. A., until noon, Nov. 23, for constructing a rubble wound breakwater at Superior Entry, Wis.

CANAL WORK.—Tecumseh, Neb. — The Drainage Board of Drainage District No. 1, Johnson County, will soon ask for bids for canal work.

RETAINING WALL.—Missoula, Mont.—The contract for the construction of a steel and reinforced concrete retaining wall 320 ft. long has been let to NELSON & PEDERSON, Butte.

DRAINAGE SYSTEM.—Morrilton, Ark. — Bids will be received about Dec. 1 for the construction of a drainage system. Estimated cost, $80,000. R. L. Greer is City Clk.

CANAL.—Helena, Ark.—The contract for constructing the Yellow Bank canal for the Yellow Bank Drainage District has been awarded to the O. O. McDONALD CONSTRUCTION CO., Collistonn, La. Estimated cost, $70,000.

CHANNEL.—Houston, Tex.—Harris County will vote in December on the organization of the Harris County-Houston Ship Canal Navigation District and issuance of $1,250,000 of bonds to aid the government in completing the channel to a depth of 25 ft. from Gulf to Fort Houston.

DITCH.—Angleton, Tex.—Bids have been received by the Commissioners of Brazoria County Drainage District No. 4, at Angleton, for approximately 646,786 cu. yds. of earth excavation for the construction of canals, drains, ditches and laterals in the drainage district; clearing and grubbing 13.1 acres of land, cleaning 16.6 acres of land, from plans of William Bradburn, of Pearland. The contract has been awarded, it is reported, to B. ARPEN & CO., at 13.8 cts. per cu. yd.

LEVEE WORK.—Allenfarm, Tex.—The date for receiving bids for the construction of about four miles of levee and the completion of eight miles of levee partially constructed, located in Brazos Bottom, south portion of Brazos County, has been extended from Nov. 5, as noted on Oct. 13, to 1 p. m., Nov. 19. Bids will be received by the Commissioners. Bids will be received by the Commissioners of Brazos County Improvement District No. 1, at Terrell's store, Allenfarm. T. R. Batte, Jr., is Engr., Rio Bravo Oil Co., Houston.

DREDGING.—Galveston, Tex. — The ATLANTIC GULF & PACIFIC CO., Philadelphia, Pa., it is reported, has secured the contract for improving the Texas City channel at $107,275.

REBUILDING PIER.—Galveston, Tex. — Southern Pacific Terminal Co. will rebuild Pier C, lately destroyed by fire.

WIRE FENCE.—Fort Sam Houston, Tex. Bids will be received until 11 a. m., Nov. 17, by P. W. Guiney, Constr. Q. M., U. S. A., Fort Sam Houston, for the construction of about 7,000 ft. of woven wire fence, with gates.

DIKES.—Seattle, Wash.—The contract has been awarded to the INTERNATIONAL CONTRACT CO., 501 Central Bldg., Seattle, for constructing dikes at Skagit River, at $92,924. Noted on Oct. 20.

WING DAMS.—Ferndale, Wash. — The CASCADE TRADING & CONSTRUCTION CO., Seattle, Wash., has been awarded the contract by Whatcom, for building six small wing dams along the west bank of the Nooksach River, south of Ferndale, at $3,062.

PIPE, ETC.—Newport, Ore.—The City Recorder has been authorized to purchase 1,000 ft. of galvanized pipe, ¾ in., and fittings.

DREDGING.—San Diego, Cal.—The contract has been awarded to the STANDARD AMERICAN DREDGING CO., San Francisco, Cal., at 14.89 cts., for dredging in San Diego Harbor. Estimated quantity to be removed, 460,000 cu. yds. Noted Sept. 15.

LEVEE WORK.—Yuba City, Cal.—LAWERY & FALCONER have been awarded the contract for raising and repairing the levee near the Hock Farm in Levee District No. 1, near here, at 30 cts. per cu. yd. About 15,-000 cu. yds. of earth is involved in this contract.

ROCK CRUSHERS. — Corona, Cal. — The Corona Rock Co., Corona, will install three new rock crushers, a new air compressor and a complete equipment of air driven drills.

POWDER MAGAZINE.—Whipple Barracks (Prescott post-office) Ariz.—Bids will be received until 3 p. m. Oct 28, by Lieut. G. G. Bartlett, Constr. Q. M., U. S. A., Whipple Barracks, for the construction of a powder magazine here.

WIRE FENCE. — McGill, Nev. — SAM WHITE, of Carson City, Nev., has been awarded contract for constructing 56 miles of wire fencing around the Adams and McGill ranch here. Estimated cost, $15,680.

PIER.—Ste. Croix, Que.—R. S. Desrochers, Secy. Pub. Wks., Ottawa, Ont., will receive bids until noon, Nov. 2, for the construction of a landing pier here.

BREAKWATER, WHARF, ETC.—Ottawa, Ont.—Bids will be received until Nov. 7, by R. S. Desrochers, Secy., Dept. Pub. Wks., Ottawa, for the construction of a breakwater here; beach protection work at Three Fathom Harbor, N. S., and breakwater at Block Point, N. S.; also until Nov. 8 for extension to wharf at South Ingomish, N. S., and for two ice piers at Annapolis, Royal, N. S., and wharf and stone approach at Gravenhurst, Township of Muskoka, Ont.

FREIGHT SHEDS, ETC.—Ottawa, Ont.—Bids will be received at the office of the Commissioners of the Transcontinental Ry., Ottawa, until noon, Nov. 8, for the construction, etc., of freight sheds and storehouses at Lake Superior Junction, Ont., Redditt, Man., and Springfield, Man., the freight sheds to be completed before March 1, 1911. 1911, and the storehouses on or before June P. E. Ryan is Secy.

EXCAVATION OF CHANNEL. — Ottawa, Ont.—Bids will be received by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, until 4 p. m., Nov. 15, for excavating part of a channel alone the completed sluices of the Temiskaming dam on the west or Ontario side of the Ottawa River.

TRAP ROCK.—Fredericton, N. B.—The city is asking for bids for the supply of 3,-000 tons of trap rock for the construction of tarvia pavement, to be supplied during the coming winter.

SEAWALL.—Victoria, B. C.—The PACIFIC COAST CONSTRUCTION CO., Victoria, has been awarded the contract for the new sea wall here, at $74,389.

CABLE, ETC.—Vancouver, B. C.—The British Columbia Telephone Co., has awarded contracts for $500,000 of material as follows: To the WIRE & CABLE CO., Montreal, for about 250,000 ft. of cable, average size of 200 pair of wires per cable, and for 25 tons of supporting wire; to the NORTHERN ELECTRIC CO., Montreal, for 52 switchboard sections, and 3,000 telephone instruments.

EXAMINATIONS.

AID.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Nov. 22-23, to secure eligibles from which to make certification to fill about ten vacancies in the position of Deck Officer and similar vacancies as they may occur in the positions of Aid and Deck Officer in the Coast and Geodetic Survey. Applicants must have reached their 18th, and not their 25th birthday, on the date of the examination. Application and examination form 1312. Aids are appointed at a salary of $720 a year. The next steps in the line of promotion are to the salaries of $900 and $1,100 as aid, and thence to assistant at $1,200, and then upward by steps of $200 each. The low now provides for 10 aids at $720 a year, 13 aids at $900, 6 aids at $1,100, 34 assistants at $1,200 to $1,800, and 30 assistants at $2,000 to $4,000.

COPPERPLATE MAP ENGRAVER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Nov. 23, to secure eligibles from which to make certification to fill a vacancy in the position of Copperplate Map Engraver, $1,000 a year, Coast and Geodetic Survey, and vacancies requiring similar qualifications as they may occur in any branch of the service, unless it shall be decided in the interest of the service to fill the vacancy by reinstatement, transfer, or promotion. Age limit, 18 years. Application form 1800 and special form.

EDITORIAL CLERK.—Washington, D. C.—The U. S. Civil Service Commission announces that the examination to be held Nov. 9-10, for Editorial Clerk, is for filling the position of Editorial Clerk in any Department in which the qualifications tested are desired. In addition to the vacancy now existing in the position of Editorial Clerk in the Division of Publications, Department of Agriculture, at $1,400 a year, a vacancy in the position of Editorial Clerk in the Geological Survey, at an entrance salary of $1,500 a year, may also be filled from this examination if it results in men with the requisite qualifications. It may be decided in the interest of the service to fill any vacancies by reinstatement, transfer or promotion.

JUNIOR ENGINEER.—Pittsburg, Pa.—The U. S. Civil Service Commission announces an examination on Nov. 22-23, to secure eligibles from which to make certification to fill a vacancy in the position of Junior (mechanical) Engineer, $1,020 a year, Bureau of Mines, Pittsburg, and vacancies requiring similar qualifications as they may occur in the Bureau of Mines, unless it shall be decided in the interest of the service to fill the vacancy by reinstatement, transfer or promotion. Age limit, 21 years. Application form 1312.

CONTRACT PRICES.

(*Denotes that this work is advertised in Engineering News.)

VIADUCT.—Dallas, Tex.—Bids were received Oct. 1 for the Dallas-Oak Cliff Viaduct. The bidders were: (A) American Construction Co., Houston, (B) CORRIGAN, LEE & HALPIN, Kansas City (awarded contract); (C), MacArthur Bros., New York; (D) Hull & Upson, New York; (E) Wm. P. Carmichael Co., St. Louis; (F) Jas. Stewart & Co., St. Louis; (G) Kahmann & McMurray, Kansas City; (H) Fred. A. Jones Co., Houston. The itemized bids were as follows:

VIADUCT, DALLAS, TEX.

	A	B	C	D	E	F	G	H
40,800 lin. ft. concrete piling	$1.11	$0.90	$0.45	$0.60	$0.90	$0.75	$0.65	$0.85
8,640 lin. ft. timber piling	.65	.48	.45	.25	.50	.35	.60	.35
2,600 cu. yds. concrete girders and stairs	4.83	7.60	6.30	6.00	8.00	8.64	9.00	9.15
5,536 cu. yds. concrete bases of arch piers	4.55	5.50	2.70	2.40	6.50	5.05	5.75	5.25
544 cu. yds. concrete bases of river piers	4.55	8.00	4.00	2.40	8.00	16.05	7.00	16.00
8,260 cu. yds. concrete shafts of all piers	4.65	3.25	3.80	3.10	4.50	4.85	7.00	6.40
14,143 cu. yds. concrete arch rings & top of shafts	4.73	5.70	7.00	2.80	5.60	8.50	7.75	8.60
12,077 cu. yds. concrete above arch ring and river span	4.80	6.75	6.35	6.00	6.56	8.33	9.00	9.60
1,243 cu. yds. concrete abutments and ret. walls	4.80	5.40	6.35	4.00	6.00	6.15	7.50	11.50
3,280,000 lbs. steel reinforcing	.0325	.0253	.0311	.03	.026	.033	.026	.03
303,600 lbs. steel river span	.037	.0425	.0473	.05	.04	.045	.05	*.045
16,000 lbs. cast-iron drains and bearing	.044	.03	.04	.04	.03	.06	.05	.045
20,975 sq. yds. paving, macadam	1.06	1.10	.85	1.00	.80	1.25	2.50	.90
10,420 lin. ft. railing and parapets	1.00	1.50	1.70	2.00	2.50	2.25	2.00	1.55
130 lamp posts, 3 light	9.00	16.00	14.20	14.00	10.00	11.08	12.00	15.00
4 lamp posts, 1 light	9.00	16.00	14.20	14.00	10.00	11.08	12.00	15.00
4,836 cu. yds. earth fill North Approach	.75	.50	.50	.50	.65	.50	.50	.60
Totals	$423,391	$454,721	$433,907	$364,301	$457,947	$545,827	$561,751	$564,712

U. S. POSSESSIONS.

DREDGING.—Hawaii.—Bids will be received until 11 a. m., Jan. 7 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C. R. C. Hollyday, Ch. of Bureau, for dredging at the U. S. Naval Station, Honolulu, H. I., as per specification No. 1751.

CONCRETE HANDLING PLANT.—Panama.—Bids will be received by the Purchasing Officer Isthmian Canal Comn., Washington, D. C., until Oct. 31, for furnishing two concrete handling plants. Delivery is required at the earliest possible date. The plants to be in accordance with exhibit A and one in accordance with exhibit C, shown on drawing A-5-25, dated Aug. 15, 1910 and specifications shown thereon. Capt. F. C. Boggs, Corps of Engrs., U. S. is Gen. Purchasing Officer.

ELECTRICAL MATERIAL, ETC.—Panama.—Bids will be received until 10.30 a. m., Nov. 14, by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Agt., Isthmian Canal Comn., Washington, D. C., for electrical material, including fittings, fixtures, insulating material, line materi[illegible] hardware, tools, rubber gloves, wire, elec[illegible] and steel cable.

MANGANESE DIPPER LIPS[illegible] Bids were opened on Oct. 14, by the Purch[illegible] Officer, Isthmian Canal Comn., Washi[illegible] D. C., for furnishing 1,170 dipper lips, [illegible]anganese, teeth, as follows: Taylor Iron [illegible] Steel Co., High Bridge, N. J., $23,731; Co[illegible] one-half by Dec. 20 and balance Feb. 1. [illegible] Edgar Allen Manganese Steel Co., C[illegible]go, Ill., $14,333 or 10.9 cts per lb; one-[illegible] by Dec. 20, 25% of the balance Jan. 1, a[illegible] complete delivery Feb. 20, 1911.

LIST OF CONTRACTS PENDING.

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
10-28*	Water supply, Hohokus, N. J. (P & S)	10-27
10-29*	Stone dam, Cincinnati, Ohio	(S.) 9-29
10-31	Embankment, Duluth, Minn.	(S.)10- 6
11- 1*	Canals, etc., North Yakima, Wash.	P. & S.) 9-29
11- 1*	Reservoir, Binghamton, N. Y.	(P. & S.) 9-22
11- 1*	Engine, Atlantic City, N. J.	(S) 10-20
11- 5	Extension to dike, Vallejo, Cal.	(S.) 9-29
11- 5	Gas house remodeling, Mare Island, Cal.	(S.) 9-15
11- 5	Steel shed, Charleston, S. C.	(S.)10-13
11- 7*	Bridge, Pueblo, Colo.	(P. & S.) 10-20
11- 7	Dredging, Los Angeles, Cal	(S) 10-20
11-12	Capstan, New York	(S.)10-13
11-12	Dredging, Wilmington, N. C.	(S.)10-20
11-12	Power plant, Annapolis, Md.	(S.) 10-20
11-19	Quarters, Mare Island, Cal.	(S.)10-13
11-19	Seawall, Norfolk, Va.	(S.)10-20
11-30*	Diversion channel, Portland, Ore.	(S.) 9-29
12- 3	Coal & Ash handling apparatus, Norfolk, Va.	(S)- 10-27
12- 3	Boilers, etc., New Orleans, La.	(S) 10-27
1- 7	Dredging, Hawaii (U. S. Poss.)	(S) 10-27

Light, Heat and Power Plants.

Bids open.		Noted in issue of
10-28	Elec. light plant, Seward, Neb.	10-20
10-28	Heating plant, Fort, D. A. Russell, Wyo	10-27
10-28	Elec. lights, New Haven, Conn.	10-27
10-28	Elec. light system, Spalding, Neb	10-27
10-28	Elec. wiring, etc., Omaha, Neb.	10-27
10-31	Elec. light system, Egypt (Foreign)	10- 6
10-31	Electric wires, etc., Boston, Mass.	10-20
10-31	Heating and vent., New York	10-20
10-31	Heating and vent. system, Cleveland, Ohio	10-20
11- 1	Lighting system, New York	10-20
11- 1	Elec. light plant, Smithfield, N. C.	10-27
11- 2	Heating and vent., Revere, Mass	10-20
11- 3	Generators, Grand Rapids, Mich.	10-27
11- 3	Light fixtures, etc., Los Angeles, Cal.	10-27
11- 3	Light fixtures, New York	10-13
11- 3	Elec. equipment, Canby, Minn.	9-29
11- 5	Gas house remodeling, Vallejo, Cal.	9-15
11- 7	Elec. fixtures, Montesano, Wash.	10-20
11- 7	Heating plant, Santa Ana, Cal.	10-27
11- 9	Lighting fixtures, Washington, D. C.	10-27
11-10	Elec. light plant, Lakeland, Fla.	10-27
11-12	Power plant, Annapolis, Md.	10-20
11-14	Franchise, Bodie, Cal.	10-13
11-14	Elec. material, Panama (U. S. Poss)	10-27
11-16	Elec. cables, New York	10-27
11-19	Elec. driven pumps, Norfolk, Va.	10-27
11-28*	Elec. light, etc., South River, N. J.	10-27
12- 1*	Heating and vent. system, New York	10-20
12- 1	Elec. elevator equip., New York	10-20
12- 3	Boilers, etc., New Orleans, La.	10-27

Bridges.

Bids close.		Noted in issue of
10-28*	Bridge, Layton, N. J.	10-20
10-29	Bridge, Harrisburg, Pa.	10-27
10-29	Bridge, De Sota, Mo.	10-27
10-29	Bridge, Rushville, Ind.	10-27
10-31	Bridge, Bagley, Minn.	10-27
10-31	Bridge, Youngstown, Ohio	10-27
10-31	Bridge, Zanesville, Ohio	10-13
10-31	Bridge, Ukiah, Cal.	9-29
11- 2	Bridges, Tallulah, La.	10-13
11- 2	Bridges, Cleveland, Ohio	10-27
11- 7	Bridge, Columbus, Ohio	10-27
11- 7	Bridge, Greenfield, Ind.	10-27
11- 7	Bridge, Pueblo, Colo.	10-20
11- 9	Bridge, Merced, Cal.	10-27
11-10	Bridge, Indianapolis, Ind.	10-27
11-10	Bridge, San Diego, Cal.	10-27
11-10	Bridge, San Luis Obispo, Cal.	10-27
11-11	Bridge, Cincinnati, Ohio	10-27
11-11	Bridge, Indianapolis, Ind.	10-20
11-14	Bridge, Brawley, Cal.	10-27
11-14	Bridge work, El Centro, Cal.	10-27
12- 1	Bridge, Montmagny, Que.	10-27

Buildings.

Bids close.		Noted in issue of
10-29	Building, Raybrook, N. Y.	10-13
10-31	Hospital, Boston, Mass.	10-13
10-31	Masonry work, etc., Oakley, O.	10-27
11- 1	High school, Bloomfield, N. J.	10-13
11- 1*	Hospital, Winnebago, Wis.	10-20
11- 1	Plans, Toronto, Ont.	6- 9
11- 2	School, Revere, Mass.	10-20
11- 2	Armory, High River, Alta.	10-27
11- 3	Hospital, New York, N. Y.	10-27
11- 3	Hospital Bldg., Iowa City, Ia.	10-27
11- 3	Buildings, Ames, Iowa	10-27
11- 3	Laundry bldg., Cleveland, Ohio.	(Mfg. Pl.)10-13
11- 4	School, Deming, N. Mex.	10-27
11- 5	Remodeling gas house, Mare Island, Cal.	9-15
11- 7	Post-office, Demopolis, Ala.	10- 6
11- 7	School, Cleveland, Ohio	10-27
11- 8	Freight sheds, etc., Ottawa, Ont.	10-27
11- 8	Quarters, etc., Genoa, Neb.	10-20
11- 9	Post-office, Dresden, Ont.	10-27
11-10	Building, etc., Lima, Ohio	10-27
11-10	Barracks, National Soldiers Home, Va.	10-20
11-14	Post-office, Pontiac, Mich.	9-22
11-19	Quarters, Mare Island, Cal.	10-13
11-19	Post-office, Eagle Pass, Tex.	10-13
11-22*	Post-office, Lewiston, Idaho	10- 6
11-22	Post-office, Porto Rico	10- 6
11-30	Building, Phila., Pa.	9-29
12- 1	Post-office, New York, N. Y.	10-20
12- 1	School, Portland, Ore.	10-27
12- 5	Schools, Toledo, Ohio	10-27
1-31	Court-house, Onida, S. Dak.	10-20
4-15	Plans, Havana, Cuba	10-20

Water-Works.

Bids close.		Noted in issue of
10-28*	Pumping station, Peoria, Ill.	10-20
10-28	Water pipe, etc., Newark, Ohio	10-20
10-28*	Water supply, Hohokus, N. J.	10-27
10-28	Piping, etc., Chicago, Ill.	10-27
10-28	Water main, Fort Baker, Cal.	10-27
10-28	Water pipes, Superior, Wis.	10-27
10-28	Well, Triumph, Minn.	10-27
10-29	Sub laterals, No. Yakima, Wash.	9-29
10-31	Water system, Egypt, (Foreign)	10- 6
11- 1*	Engine, Atlantic City, N. J.	10-20
11- 1*	Reservoir, Binghamton, N. Y.	9-22
11- 1*	Canals, etc., North Yakima, Wash	9-29
11- 1	Water plant, Owensboro, Ky.	10- 6
11- 2	Water mains, etc., New York	10-20
11- 3*	Pumping engine, Brookline, Mass.	10-13
11- 3	Reservoir, etc., McLeansboro, Ill.	10-27
11- 4*	W.-Wks., Saegerstown, Pa.	10-27
11- 7	Pumping plant, Appleton, Minn.	10-27
11- 7	Pump. Sta. work, Pittsburg, Pa.	10-27
11- 7	Water mains, etc., Chanute, Kan.	10-20
11-28*	Water-works, South River, N. J.	10-27
11-30*	Diversion channel, Portland, Ore.	9-29
12- 1*	Head gates, Boise, Idaho	10-20
12-15*	Diversion work, Klamath Falls, Ore.	10-20

Sewers.

Bids close.		Noted in issue of
10-28*	Sewers, Westfield, N. Y.	10- 6
10-29	Sewers, Brainerd, Minn.	10-20
10-31	Sewer, Syracuse, N. Y.	10-27
11- 1	Sewer, Waterbury, Conn.	10-27
11- 1*	Sewage, South Amboy, N. J.	10-27
11- 1	Sewer, Smithfield, N. C.	10-27
11- 1	Sewer, Cincinnati, Ohio	10-27
11- 1	Sewer, Duluth, Minn.	10-27
11- 1	Sewer, Prosser, Wash.	10-27
11- 1	Sewers, Shelbyville, Ind.	9-29
11- 1*	Sewers, Atlanta, Ga.	10- 6
11- 1*	Sewers, Eastman, Ga.	10-13
11- 1*	Sewer system, Bellefontaine, O.	10-20
11- 2	Sewers, Oakland, Cal.	10-20
11- 2*	Sewer, Baltimore, Md.	10-27
11- 7	Sewers, Scranton, Pa.	10-27
11- 7	Sewers, Roseville, Cal.	10-20
11-14*	Sewers, Atlantic City, N. J.	10-20
11-17*	Sewer, Keyport, N. J.	10-27
11-18	Sewer, Ft. Caswell, N. C.	10-27
11-28*	Sewers, South River, N. J.	10-27

Streets and Roads.

Bids close.		Noted in issue of
10-28	Paving, Lincoln, Neb.	10-27
10-28	Road, Wethersfield, Conn.	10-27
10-28	Macadam road, Bloomfield, Conn	10-27
10-29	Grading, etc., Cleveland, Ohio	10-20
10-29	Paving, Racine, Wis.	10-13
10-31	Paving, Spokane, Wash.	10-13
10-31*	Paving, Portsmouth, Va.	10-20
10-31*	Paving, Asbury Park, N. J.	10-27
10-31	Grading, Boston, Mass.	10-27
10-31	Paving, Syracuse, N. Y.	10-27
11- 1	Road, Eaton, Ohio	10-27
11- 1*	Roads, Jacksonville, Fla.	10- 6
11- 2	Change of grade, Cleveland, Ohio	10-20
11- 2	Repaving, New York, N. Y.	10-20
11- 2	Grading, etc., Walla Walla, Wash.	10-27
11- 2	Paving, Chicago, Ill.	10-27
11- 2	Road, Toledo, Ohio	10-27
11- 2	Sidewalk, Madisonville, Ohio	10-27
11- 4	Sidewalks, Allentown, Pa.	10-27
11- 5	Roads, etc., Fort Ward, Wash.	10-27
11- 7	Grading, Santa Barbara, Cal.	10-27
11- 7	Roads, Fowler, Ind.	10-27
11- 7	Road, Vernon, Ind.	10-13
11- 7*	Streets, Westfield, N. J.	10-13
11- 7	Grading, etc., New York	10-27
11- 9	Roads, Rensselaer, Ind.	10-20
11- 9	Grading, Wabash, Ind.	10-20
11- 9	Road, Chardon, Ohio	10-27
11- 9	Road, Caldwell, Ohio	10-27
11-10	Roads, Rushville, Ind.	10-13
11-11	Gravel road, Lafayette, Ind.	10-20
11-12	Road, Fort Wayne, Ind.	10- 6
11-14	Grading, El Centro, Cal.	10-27
11-14	Paving, Huntington, W. Va.	10-27
11-14	Roads, Washington, Pa.	10-27
11-15	Road, Logansport, Ind.	10-27
11-18	Road improvement, Cincinnati, Ohio	10-27

Miscellaneous.

Bids close.		Noted in issue of
10-28	Shed, track, etc., Fort Morgan, Ala.	10-20
10-28	Garbage, (Garbage), New Albany, Ind.	10- 6
10-28	Fire engine, Duluth, Minn.	10-13
10-28	Culvert, Revetment wall, Columbus, Ohio	10-27
10-28	Powder magazine, Whipple Barracks, Ariz.	10-27
10-28	Repairing scow, Boston, Mass.	10-27
10-28	Ditch work, Burlington, Iowa	10-27
10-29	Ditch, Frankfort, Ind.	10-27
10-29	Wharf, etc., Seattle, Wash.	10-20
10-29	Levees, Santa Aria, Cal.	10-20
10-29*	Cement, Wheeling, W. Va.	10-20
10-29	Wall, Carlisle, Pa.	10-20
10-31	Fire engine, Porterville, Cal.	10-20
10-31	Earthwork, New Orleans, La.	10-20
10-31	Stone, Boston, Mass.	10-13
10-31	Lighthouse, buoy steamer, Victoria, B. C.	9- 8
10-31	Steamer, Victoria, B. C.	9-15
10-31	Railway supplies, New Zealand (Foreign)	10- 6
10-31*	Crib and embankment, Duluth, Minn.	10- 6
10-31	Steamer, Ottawa, Ont.	10-13
10-31	Culvert, Los Angeles, Cal.	10-20
10-31	Grandstand, etc., Cleveland, O.	10-20
10-31	Culvert, repair, South Bend, Ind.	10-20
10-31	Concrete handling plants, Panama (U. S. Poss.)	10-27
11- 1	Levee work, Shreveport, La.	10-27
11- 1	Ditches, Blue Earth, Minn.	10-27
11- 1	Gravel, etc., Moss Point, Miss.	10-27
11- 1	Sheet copper, etc., Washington, D. C.	10-27
11- 1	Shed, Elizabeth, N. J.	10-27
11- 1*	Brackets, etc., Norfolk, Va.	10- 6
11- 1	Dredging, Cleveland, Ohio	10- 6
11- 1	Jetty extension, Cleveland, O.	10- 6
11- 1	Ditches, Chadbourn, N. C.	10-20
11- 1*	Wharf specifications, plans, etc., Richmond, Va.	10-20
11- 2	Protection pier, Winnipeg, Man.	10-20
11- 2	Automobile, London, Ont.	10- 6
11- 2	Pier, Ste. Croix, Que.	10-27
11- 2*	Concrete monuments, Ventnor City, N. J.	10-27
11- 3	Drain tile, Harvel, Ill.	10-27
11- 3	Aviary, etc., New York	10-27
11- 3	Dredging, Newark, N. J.	10-27
11- 3*	Chain grate stokers, Grand Rapids, Mich.	10-27
11- 5	Rock, New Orleans, La.	10-27
11- 5	Extension to dike, Vallejo, Cal.	9-29
11- 5	Dam, Cincinnati, Ohio	10-13
11- 7	Retaining wall, Cleveland, Ohio	10-20
11- 7	Wharf extension, Providence Bay, Ont.	10-20
11- 7	Dredging, Los Angeles, Cal.	10-20
11- 7*	Dredging, rock removal, New York	10-13
11- 7	Ditch, Minneapolis, Minn.	10-27
11- 7	Breakwater, etc., Ottawa, Ont.	10-27
11- 7	Retaining wall, Ashtabula, Ohio	10-27
11- 7	Iron railings, wall, New York	10-27
11- 8	Wharf, etc., Ottawa, Ont.	10-27
11- 8	Freight sheds, Ottawa, Ont.	10-27
11- 8*	Guide walls, etc., Cincinnati, O.	10-13
11- 8*	Dredging, Wilmington, Del.	10-13
11- 8	Torpedo boat destroyer, Washington, D. C.	9- 8
11-10*	Breakwater, Detroit, Mich.	10-13
11-10	Repairing breakwater, Cleveland, Ohio	10-20
11-12	Dredging, Wilmington, N. C.	10-20
11-12	Capstan, New York	10-13
11-12*	Wooden pier, Annapolis, Md.	10-13
11-12*	Riprap stone, Boston Mass.	10-13
11-12	Ditches, Crookston, Minn.	10-27
11-12	See "Electric Railways," Calgary, Alta	10-27
11-14	Wall and gates, Chalmette, La.	10-27
11-15	Excavation of channel, Ottawa, Ont.	10-27
11-15	Dredging, Wilmington, Del.	10-27
11-15	Hulls, flat-boats, etc., Cincinnati, Ohio	10-20
11-16	Incinerating plants (Garbage) San Francisco, Cal.	8-25
11-16*	Steamboat, St. Louis, Mo.	10- 6
11-17*	Dredging, Wilmington, Del.	10-20
11-17	Riprap, Boston, Mass.	10-20
11-17	Wire fence, Fort Sam Houston, Texas	10-27
11-19	Levee work, Allenfarm, Tex.	10-27
11-19	Seawall, Norfolk, Va.	10-20
11-19*	Dredging, Newport, R. I.	10-20
11-22	Mechanical stokers, Akron, Ohio.	10-27
11-22*	Dredging, New York	10-27
11-23*	Dredging, Boston, Mass.	10-27
11-23*	Removing dike, dredging Cincinnati, Ohio	10-27
11-23*	Breakwater, Duluth, Minn.	10-27
11-23*	Dredging, Boston, Mass.	10-27
12- 1	Door operating system, New York.	10-20
——	*Excavation and embankment Hinckley, N. Y.	10-20
12- 1	Port works, Turkey (Foreign).	10- 6
12- 1	Battleship, Colliers, Washington, D. C.	10- 6
12- 3	Coal and ash handling apparatus, Norfolk, Va.	10-27
12-13	(1911) Copper mine, Turkey (Foreign)	10- 6
1- 7	Dredging, Hawaii (U. S. Poss).	10-27

Examinations.

Applications filed.		Noted in issue of
11- 2	Junior Chemist, Pittsburg, Pa.	9-29
11- 9	Mining Engr., Pittsburg, Pa.	9-29
11- 9	Testing Engr., Wash., D. C.	9-29
11- 9	Testing Engr., Seattle, Wash.	10- 6
11- 9	Electrical Asst., Wash., D. C.	10- 6
11- 9	Supt. of Construction, McNeil Island, Wash.	10- 6
11- 9	Laboratory Aid, Pittsburg, Pa.	10- 6
11- 9	Mechanician, Mount Weather, Va.	10-20
11- 9	Inspector of Engineering, Washington, D. C.	10-20
11- 9	Hydro-electrical engineer, San Francisco, Cal.	11-20
11- 9	Wireless telegraph operator, Hawaii	10-20
11- 9	Editorial Clerk, Wash, D. C.	10-27
11-16	Assistant chemist, Trenton, N. J.	10-20
11-16	Sanitary engineer, Trenton, N.J.	10-20
11-16	Sanitary inspector, Trenton, N.J.	10-20
11-22	Junior Engr., Pittsburg, Pa.	10-27
11-22	Aid, Washington, D. C.	10-27
11-23	Copperplate Map Engraver, Wash., D. C.	10-27
11-26	Telephone traffic inspector, Albany, N. Y.	10-20
11-26	Special investigator, Albany, N.Y.	10-20
11-26	Mechanical engr., Albany, N.Y.	10-20
11-26	Junior statistician, Albany, N. Y.	10-20
11-26	Highway inspector, Albany, N.Y.	10-20
11-26	Chief investigator, Albany, N. Y.	10-20
11-26	Assistant gas inspector, Albany, N. Y.	10-20
11-26	Assistant chief, Albany, N. Y.	10-20

INDUSTRIAL NOTE[illegible]

THE PENN BRIDGE CO., [illegible]EAVER FALLS, PA., announces that [illegible]ton & Porter have been appointed Eas[illegible] agents with offices in the Hudson Term[illegible] Bldg., New York City.

AN ASSOCIATION OF INTE[illegible]STS in the manufacture and sale of ma[illegible]e tools is announced by The Gisholt M[illegible]ine Co. and Joseph T. Ryerson & Son. [illegible]portant additions will be made to the pl[illegible] of the Gisholt Machine Co., at Madison, Wis. Future plans may be varied to suit [illegible]ditions as they arise but this announce[illegible]nt can not help but have an important b[illegible]ring on the machine tool trade.

THE INTERNATIONAL HARVESTER CO. OF AMERICA has recently sold a gasoline tractor to a Russian noblem[illegible] to be used in plowing on his estate. American manufacturers have heretofore secured some excellent automobile business in Russia, but the greatest difficulty in handling gasoline engines is the inability to secure competent machinists to take care of the engines. Russians who have been interviewed on the subject claim that there is a wide field for gasoline engines of all kinds, but until the laborers of Russia can develop sufficient mechanical ability to properly take care of the moving parts it will be impossible to do any large business in that country.

MR. AURELIEN BOYER, Vice-Pres. of the Duckworth-Boyer Engineering & Inspection Co., Ltd., has been named a director of l'Ecole Polytechnique, the applied science branch of Laval University. He will represent on the Board the graduates of the above named school, which shows the esteem in which this distinguished member of the profession is held by his confreres. The Duckworth-Boyer Engineering & Inspection Co., is the Inspecting Engineers for the steelwork entering into the construction of such large buildings as the New Windsor Street Station Extension, the Place Viger Station Extension, the new building of the Dominion Express Co., in Montreal and the New Bank of Montreal Building in Winnipeg, Man.

TRADE PUBLICATIONS.

RUBBER BOOTS AND SHOES.—Rubberhide Co., Boston, Mass. Paper; 3½ × 6 ins.; pp. 16; illustrated.

This little pamphlet describes a patented water-proof footwear for use of engineers, contractors, laborers and others who have to work in wet places.

INSPECTION AND TESTS.—Robert W. Hunt & Co., 1121 Rookery Building, Chicago. Paper; 3½ × 6¼ ins.; pp. 31.

This pamphlet outlines the various lines of activity of this well-known firm in engineering inspection and tests, and gives brief particulars of its physical, chemical and microphotographic laboratories.

AUTOMATIC TRAIN STOP FOR ELECTRIC RAILWAYS.—Automatic Train Stop Co., 135 Broadway, New York, N. Y. Paper; 6 × 9 ins.; pp. 7; illustrated.

The system described, the trolley wire or third-rail, is divided into sections, connected by circuit breakers. Should a car or train pass a "stop" signal, the circuit breaker would open and cut off current from the section into which the car had improperly entered. At the same time, the brakes are applied upon the car. The illustration shows a double-arm semaphore for each block. Nothing is said as to experiments or installations.

FIRE BRICK.—Baltimore Retort & Fire Brick Co., Baltimore, Md. Paper; 6 × 9 ins.; pp. 16; illustrated.

This booklet is Bulletin No. 2 of the company's publications and describes the shape, size and use of fire brick for furnaces and retorts. The last two pages contain tables of information on the size of chimneys for a given horse-power of the boiler; the number and shape of fire bricks required for one course of circular lining; the temperature of steam under different pressures; useful numbers such as the ratio of the diameter to the circumference of a circle and equivalents for changing gallons to cubic feet, pounds to cubic inches, etc.

AERIAL TRAMWAYS.—A. L[illegible]en & Sons Rope Co., New York, N. Y. Paper; 8½ × 11½ ins.; pp. 32; illustrated.

An aerial wire rope tramway six miles long, across the Rio Grande, from a point in Mexico to one in Texas is the subject this pamphlet. This tramway was completed last February and is used for transporting zinc ore. It forms the middle link in a system of 100 miles over which the ore must be taken to the nearest railroad which is the Southern Pacific at Marathon, Tex. The mine is five miles from the Mexican end of the tramway; over this distance and

A BOOK FOR EVERY RAILROAD MAN

ECONOMICS OF RAILWAY OPERATION

By M. L. BYERS

Chief Engineer, Maintenance-of-Way, Missouri Pacific Railway

THE GENERAL OBJECTS OF THE "ECONOMICS OF RAILWAY OPERATION" ARE

(1) **To so outline the operations of each department** as to give to those not familiar with its workings a sufficient insight to enable them readily to acquire further detailed information through their own observations, and through their ability to inquire intelligently in regard to those features which they do not understand.

(2) **To bring into clear relief the underlying principles of economic operation** with a view to the practical usefulness of this information to the employee in securing better results in that portion of the field under his direction; also to give him a clearer general understanding of the science of railroading, and so fit him for further promotion. In order to make the information available to as many as possible, the use of mathematics and technicalities has been avoided to the utmost.

CONTENTS

PART I.—ORGANIZATION.

This Part includes a general discussion of the principles of organization and the objects to be achieved thereby. The difference between Divisional and Departmental Organization is indicated, together with the relative advantages and disadvantages of each. An ideal organization stating in considerable detail the duties of the principal positions on a railroad is given, this Organization being based very largely on that of the Pennsylvania Railroad.

PART II.—EMPLOYMENT, EDUCATION AND DISCIPLINE OF FORCES.

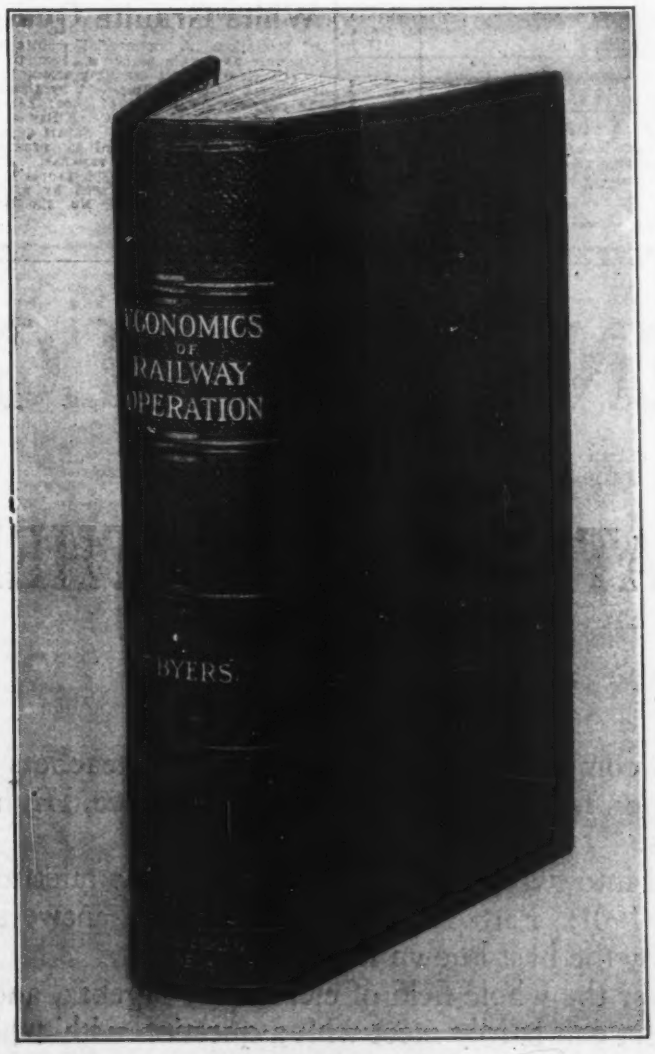
Statistics showing the number of railroad employees of the different classes in the United States are given; also, information in regard to employees' Relief Associations, Railway Relief Departments, Railway Savings and Insurance Departments, and other means for caring for the interests of the employees are shown. The subject of education and discipline of employees is discussed with a view to illustrating the underlying principles and the objects to be attained.

PART III.—ACCOUNTS AND ACCOUNTING.

The objects of accounting and the theory underlying the proper subdivision of earnings and expenses for different purposes are explained. An ideal subdivision of earnings, expense, material, and other accounts is outlined, the reasons for the subdivision being briefly stated. The system of accounting outlined is in general that of the Pennsylvania Allied Lines, the Rock Island Lines, etc., with the adoption of which the author had much to do.

PART IV.—REPORTS.

A list of the principal operating reports, together with a very brief description of the purpose of each, is given; some of the more important forms are illustrated in Part V.



CONTENTS

PART V.—ECONOMIC OPERATION.

This contains a brief outline of the general operations of each of the Departments of the Railroad, and the endeavor is made to bring clearly into relief the principles underlying economic operation and to call attention to the directions in which economies are to be secured. The object of this book is not to take the place of the special articles and treatises on different branches of railway construction, operation and maintenance, but rather to co-ordinate them and show them in their relative dimensions and relations to each other, thus making it possible for the reader to obtain a clear idea of the general subject and of the general principles involved. He will then be in a position to utilize other means for making special studies of such individual topics as may be of interest to him. Certain subjects are, however, treated in considerable detail, with the particular view of indicating how the general subjects can be amplified by special study.

PART VI.—ANALYTICAL

The increase in size of the railway system has made it impossible for the General Officer to obtain by personal inspection the information needed by him in keeping in touch with the operations under his charge, and this condition has necessitated the securing of various reports to supplement his observation; the endeavor is made to illustrate the method of using these reports and the principles upon which their arrangement must be based. Incidentally, the illustrations convey considerable information in regard to Railway Operations.

PART VII.—BETTERMENTS.

The constant growth of population carries with it the necessity for similar increase of transportation facilities; the various classes of facilities are indicated, together with the general principles to be observed in their design and the effects that may be looked for as a result of their enlargement.

PRICE $5.00 NET

THIS WORK WILL BE FOUND OF INESTIMABLE VALUE BY

(1) **All classes of railway employees** who are ambitious to fit themselves for higher positions and to secure a thorough knowledge of the business in which they are engaged.
(2) **Railway Officers** having responsible charge of various Operating Departments.
(3) **Attorneys** having a practice requiring a general knowledge of railway operations.
(4) **Engineering students** intending to follow railway engineering.

Buckram; 6 x 9 inches; about 700 pages; many figures, diagrams and forms illustrating the best recent practice.

THE ENGINEERING NEWS PUBLISHING COMPANY

220 BROADWAY, NEW YORK CITY

over the 90 miles at the Texas end the ore has to be hauled in wagons. The pamphlet consists mainly of 22 half-tone illustrations of various parts of the structure.

PHOTOGRAPHIC LENSES.—C. P. Goers, American Optical Co., New York, N. Y., Paper; 7 × 9 ins., pp. 64; illustrated.

The first 16 pages of this booklet consist of a very interesting discussion of lenses, including definitions of such terms as astigmatism, spherical aberration, chromatic aberration, etc.; tables of angles included by a lens; care of lenses; formulas for local length and size of image. The rest of the booklet deals with the various types of Goers lenses and the particulars uses in photography to which they are adopted. Some space is given to the newest types of cameras and shutters for lenses and many tables are included for use of photographers. The whole is illustrated by reproductions of many sample photographs.

GRINDING MACHINERY.—Raymond Bros. Import Pulverizer Co., Chicago, Ill.; cardboard; 8 × 11 ins.; pp. 80; illustrated.

This catalog describes grinding mills and separaters for nearly every purpose, from Alfalfa hay to cement, tobacco and paint, or for any special purpose. One page is given up to a few of the points necessary in securing a perfect air separation, six pages describes the construction and operation of the Raymond roller mill, two pages are on exhaust fans, about 20 pages are given up to particular installations of grinders and separaters, while the remainder of the booklet describes several types of automatic grinders, dust collectors, pulverizers, etc., with reproductions of drawings showing the methods of installation. The typography and illustrations are excellent.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56 of Advertisements and Construction News page 202.

U. S. ENGINEER OFFICE, Duluth, Minn., Oct. 24, 1910.—Sealed proposals for building rubble mound breakwater at Superior Entry, Wis., will be received here until noon, Nov. 23, 1910, and then publicly opened. Information on application. GRAHAM D. FITCH, Lt. Col., Engrs.

Situations Open

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